

665.53827  
Un 3m  
1973/74



# MINERAL INDUSTRY SURVEYS

U. S. DEPARTMENT OF THE INTERIOR  
BUREAU OF MINES



Rogers C. B. Morton, Secretary

Thomas V. Falkie, Director

JUNE 1974

PETROLEUM PRODUCTS SURVEY  
NO. 85

THE LIBRARY OF THE  
SEP 11 1974  
UNIVERSITY OF ILLINOIS  
AT URBANA-CHAMPAIGN

## MOTOR GASOLINES, WINTER 1973-1974



# MOTOR GASOLINES, WINTER 1973-74

by

Ella Mae Shelton

Bartlesville Energy Research Center, Bureau of Mines  
U.S. Department of the Interior, Bartlesville, Okla.

## CONTENTS

	<u>Page</u>
Introduction .....	1
Summary .....	1
Discussion of data .....	2
List of motor-gasoline survey reports, 1963-74 .....	5

## ILLUSTRATIONS

Fig.		<u>Follows</u> <u>page</u>
1.	Trends of certain characteristics of regular-price gasolines .....	5
2.	Trends of certain characteristics of premium-price gasolines .....	5
3.	Distribution of research-method octane numbers .....	5
4.	Distribution of motor-method octane numbers .....	5
5.	Distribution of Antiknock (octane) Index (RON + MON)/2 .....	5
6.	Map showing locations and numbers of samples for the national motor gasoline survey, winter 1973-74 .....	59

## TABLES

	<u>Page</u>	
1.	Summary of values, motor gasoline survey, winter 1973-74.....	7
2.	Summary of values, motor gasoline survey, winter 1972-73.....	7
3.	Average data for different brands, winter 1973-74.....	8
4.	Average data for brands in each district.....	42
5.	Data for some additional grades.....	44
6.	Analyses of low-lead content gasoline .....	51
7.	Analyses of unleaded gasoline .....	54
8.	Cumulative percents of samples of all grades by research octane numbers by districts.....	56
9.	Cumulative percents of samples of all grades by motor octane numbers by districts.....	57
10.	Cumulative percents of samples of all grades by Antiknock (octane) Index (RON + MON)/2 .....	58
11.	Locations and numbers of samples .....	59

Digitized by the Internet Archive  
in 2013

## INTRODUCTION

The properties of motor fuels sold through service stations in the United States are reported in accordance with a cooperative agreement between the American Petroleum Institute and the Bureau of Mines of the United States Department of the Interior. By agreement with the American Petroleum Institute, identification of the data is confidential.

This report presents analytical data for 4,682 samples that represent the products of 53 companies. Company representatives collected the samples during December 1973 and January and February 1974. As in previous surveys, the gasolines covered by this survey include those from both large and small suppliers. Laboratories of various refiners, motor manufacturers, and chemical companies obtained and submitted the data to the Bureau of Mines for analysis and compilation. Motor-gasoline survey reports published since 1963, including this report, are listed on page 5.

Analytical tests required for a complete gasoline analysis were not available for many of the samples. Tests in this category, the number of test results available and used in this report, and the percent of the total samples represented for that test include the following:

<u>Test</u>	<u>Number of samples used</u>	<u>Percent of total samples</u>
Gravity	3,596	77
Sulfur content	1,356	29
Phosphorus	730	16
Lead content	3,534	75
Distillation	2,854	61
Vapor pressure	2,854	61

## SUMMARY

The characteristics of motor gasolines for winter 1973-74 are summarized in table 1, and for comparison, those for winter 1972-73 are shown in table 2. Trends of some of the more important characteristics for several years are shown in figures 1 and 2. The antiknock (octane) index [(R + M)/2] data since 1970 are included in this report for the first time with other related octane number trends.

The tabulated data below show trends of national average octane numbers for the last four gasoline surveys.

	Regular-price			Premium-price		
	Octane number			Octane number		
	Research	Motor	(R+M)/2	Research	Motor	(R+M)/2
Summer 1972	94.1	86.4	90.3	99.8	92.2	96.0
Winter 1972-73	93.9	86.4	90.2	99.6	92.2	95.9
Summer 1973	93.5	86.1	89.8	99.3	91.9	95.6
Winter 1973-74	93.4	86.0	89.7	99.1	91.7	95.4

This report also includes data for special gasoline type classifications as third grade (sub-regular), intermediate grade, and super-premium.

Table 6 lists all the low-lead gasolines (0.08-0.50 g/gal) within each district and table 7 gives the unleaded gasolines (0.00-0.07 g/gal). Tables 8, 9, and 10 give cumulative percents of samples of all grades by districts for the Research- and Motor-Method octane numbers and antiknock (octane) index respectively. Table 11 lists locations and number of samples represented in each district for all samples used in the preparation of this report.

## DISCUSSION OF DATA

Terms used in the surveys have the following meanings:

District: The designation of a marketing area for collecting samples and data. The present arrangement of 17 districts, developed by the CFR Committee 1/, was selected with reference to the specifications on motor gasolines, refinery locations, population centers, and arteries of commerce such as navigable rivers. The states or parts of states in each district are indicated in the headings of table 3 and are shown in figure 6.

Brand: The gasoline sold within a given price group and by a given trade name.

Item: The index number assigned to a given brand in a given district. The data for each item represent the average of those submitted for that brand in that district. The number of samples represented follows the item number.

Sample: The supply of gasoline obtained at the service station and analyzed in the laboratory.

---

1/ Coordinating Fuel and Equipment Research Committee (formerly the Coordinating Fuel Research Committee) of the Coordinating Research Council, Inc. From 1935 to 1948 the motor-gasoline surveys were conducted under a cooperative agreement between the Coordinating Research Council and the Bureau of Mines.

Table 3 presents the following data by districts: gravity in degrees API, sulfur, gum, phosphorus, lead, research- and motor-method octane numbers, the calculated property of the sum of research and motor octane numbers divided by two [antiknock (octane) index], Reid vapor pressure, calculated data for vapor-liquid ratio of 20, and distillation characteristics of the motor fuels collected. The tests were made according to American Society for Testing and Materials standards. 2/

Corrosion test results are not included in the district tables as all the reported numbers are "1," according to the corrosion scale given in table 1 of ASTM D130. 2/

Gum test data are reported to the nearest whole number. The distillation temperatures, corrected to barometric pressure at 760 mm Hg, are those for percent evaporated.

Average values follow the tabulated data in table 3 for the respective grades of fuel shown in each district. The averages of the various properties were computed without reference to the total number of samples represented by each item.

The district averages from table 3 are shown in table 4 with the number of brands and number of samples for regular- and premium-price gasoline in each district. The national averages for each of the properties of fuels sold in each of the 17 districts are given at the end of the table.

Table 5 shows data for third grade (sub-regular), intermediate grade, and super-premium motor gasolines. Tables 6 and 7 represent special listings of the samples according to lead content. Table 6 lists the low-lead samples (0.08-0.50 g/gal) and table 7 lists the unleaded samples (0.00-0.07 g/gal).

---

2/ American Society for Testing and Materials, 1973 Annual Book of ASTM Standards, Part 17, Petroleum Products—Fuels; Solvents; Burner Fuel Oils; Lubricating Oils, Cutting Oils; Lubricating Greases; Hydraulic Fluids, Philadelphia, Pa., 1,342 pp.

The tabulated data below show trends of national averages octane numbers for the last 30 years. Figures 1 and 2 illustrate trends in the national averages of certain properties of regular- and premium-price gasolines, respectively, since the summer of 1946. This report presents, for the first time, trend data of the calculated antiknock index  $(R + M)/2$  since 1970. Averages for the winter surveys are plotted on the lines that represent the years and the summer survey data are plotted between the lines. Octane-number points are connected for successive surveys, but those for Reid vapor pressure and distillation temperatures are plotted separately for summer and winter surveys. Charts that show plots of these properties from 1935 (except winter 1941-42 and summer 1942) are presented in the survey report on motor gasolines for winter 1964-65 and preceding reports.<sup>3/</sup>

Figures 3, 4, and 5 illustrate distribution (frequency) of octane values by numbers of samples for all grades of fuel represented. Each bar represents one-half octane number.

Tables 8, 9, and 10 show the percentages of all samples for each district at each whole octane number level, cumulated according to increasing octane number. Antiknock (octane) index data by cumulative percents are presented for the first time in this report in table 10 and figure 5.

The districts, locations, and number of samples of gasoline represented are listed in table 11 and shown on the map in figure 6. The locations are named for the principal cities in the respective vicinities, and include suburbs and adjacent communities. The area of the circle at each location is proportional to the number of samples obtained. The summary at the end of table 11 lists by district, the number of locations, samples, and the percentages of the latter based on the total reported.

This report does not discuss the significance of the data presented. Reference may be made to the ASTM specification 4/ for motor gasoline and its appendixes, "Significance of ASTM Specifications for Motor Gasoline," at a technical library.

- 3/ Blade, O.C., Motor Gasolines, Winter 1964-65. Bureau of Mines Petroleum Products Survey, No. 40, 38 pp. (in cooperation with the American Petroleum Institute).
- 4/ American Society for Testing and Materials, Standard Specifications for Gasoline (D439): 1973 Annual Book of ASTM Standards, Part 17 (see footnote 2), pp. 169-181.

## LIST OF MOTOR-GASOLINE SURVEY REPORTS, 1963-73

<u>Author</u>	<u>Season and Year</u>	<u>PPS Report No.</u>	<u>Published</u>	<u>No. of Pages</u>
<b>In cooperation with the American Petroleum Institute</b>				
Blade, O. C.	Winter 1963-64	35	June 1964	40
Do.	Summer 1964	37	Dec. 1964	40
Do.	Winter 1964-65	40	July 1965	38
Do.	Summer 1965	43	Jan. 1966	39
Do.	Winter 1965-66	45	June 1966	38
Do.	Summer 1966	48	Dec. 1966	38
Do.	Winter 1966-67	50	June 1967	38
Do.	Summer 1967	53	Dec. 1967	38
Do.	Winter 1967-68	55	June 1968	39
Do.	Summer 1968	58	Jan. 1969	38
Do.	Winter 1968-69	60	July 1969	38
Blade, O.C. and Ella Mae Shelton	Summer 1969	63	Jan. 1970	38
Shelton, Ella Mae and C.M. McKinney	Winter 1969-70	66	Aug. 1970	47
Do.	Summer 1970	68	Jan. 1971	49
Do.	Winter 1970-71	70	June 1971	54
Shelton, Ella Mae	Summer 1971	73	Jan. 1972	59
Do.	Winter 1971-72	75	June 1972	53
Do.	Summer 1972	78	Jan. 1973	53
Do.	Winter 1972-73	80	June 1973	60
Do.	Summer 1973	83	Jan. 1974	59
Do.	Winter 1973-74	This report		

FIGURE 1.—Trends of Certain Characteristics of Regular-Frige Gasolines.



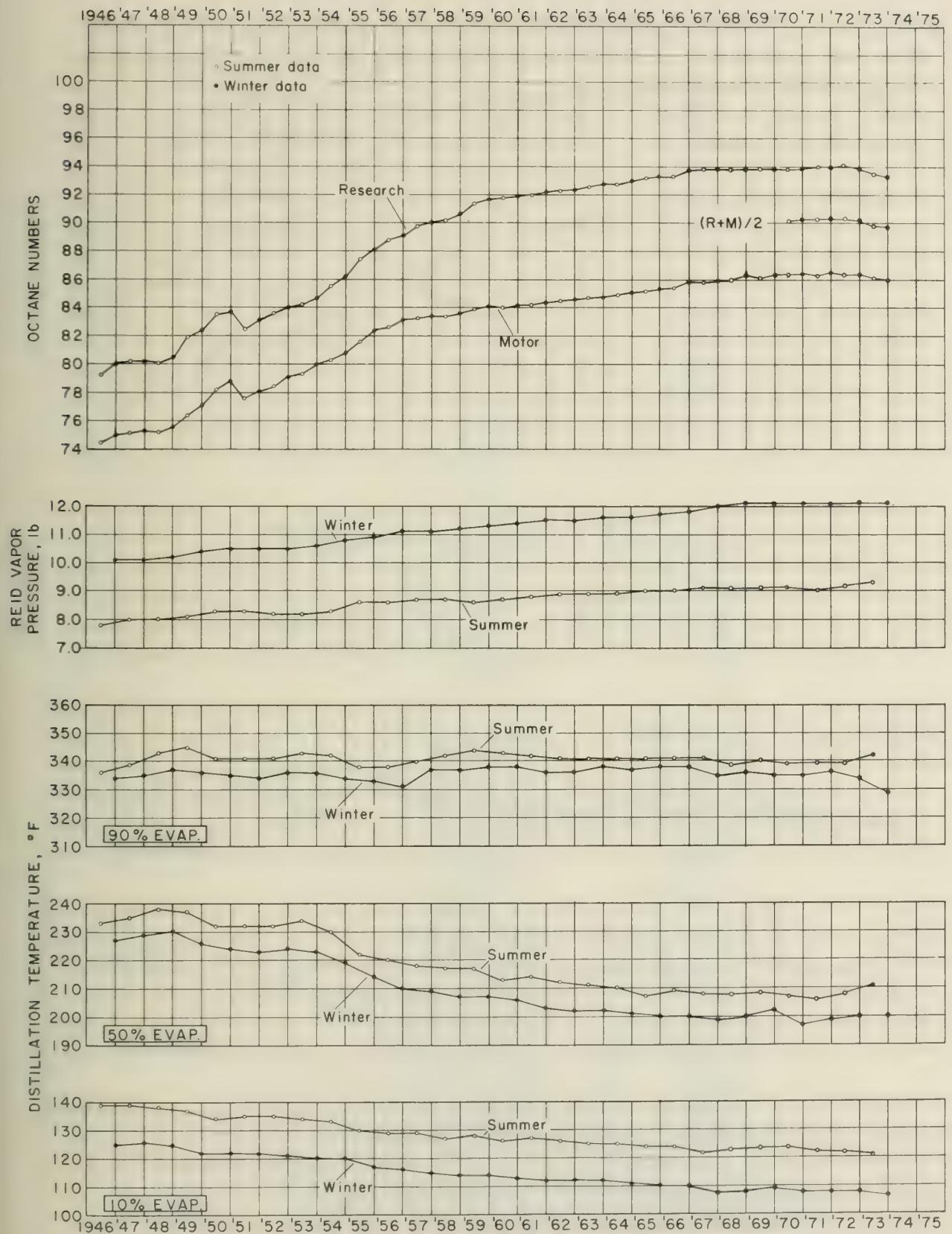


FIGURE I.—Trends of Certain Characteristics of Regular-Price Gasolines.



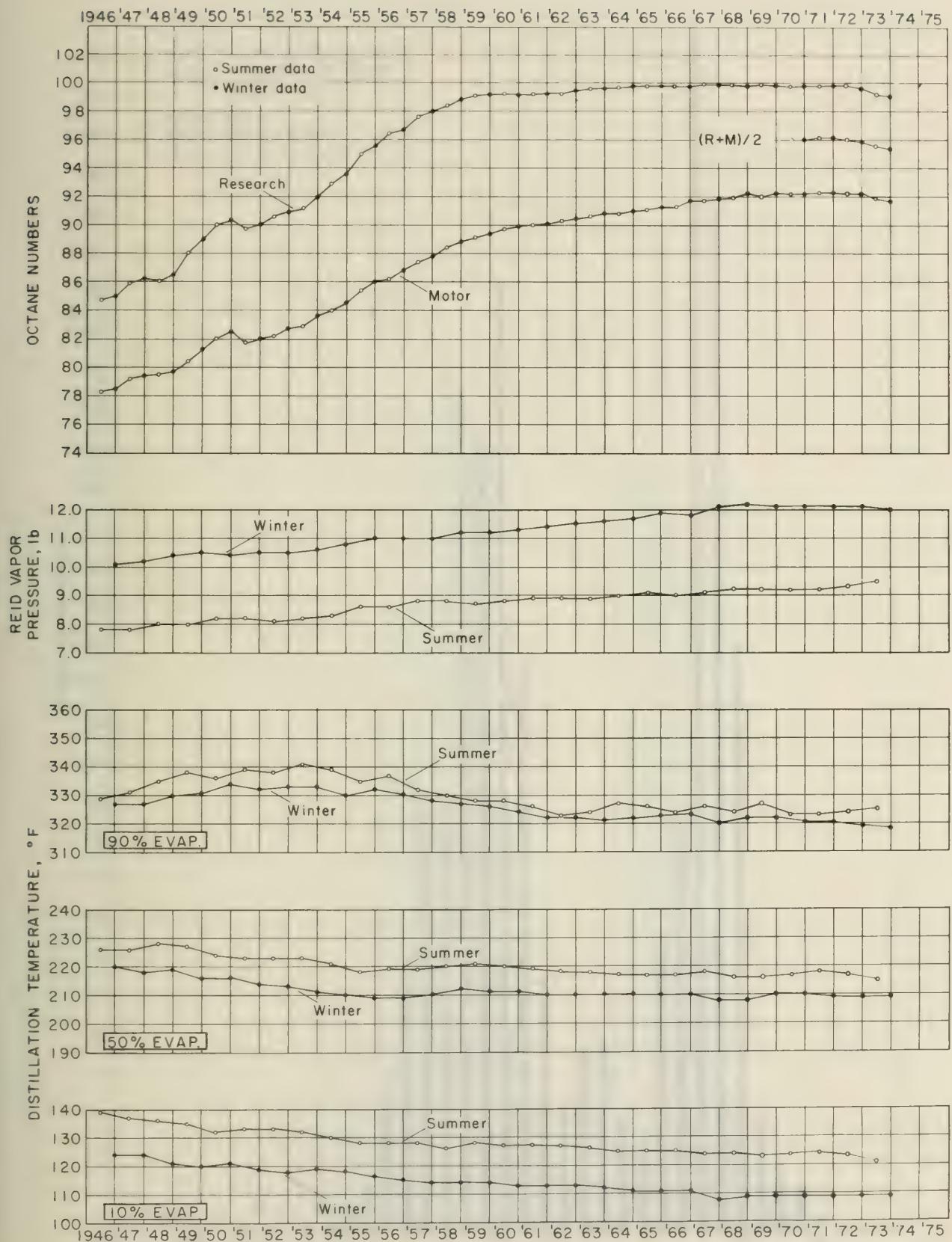


FIGURE 2.—Trends of Certain Characteristics of Premium-Price Gasolines.



FREQUENCY, samples represented

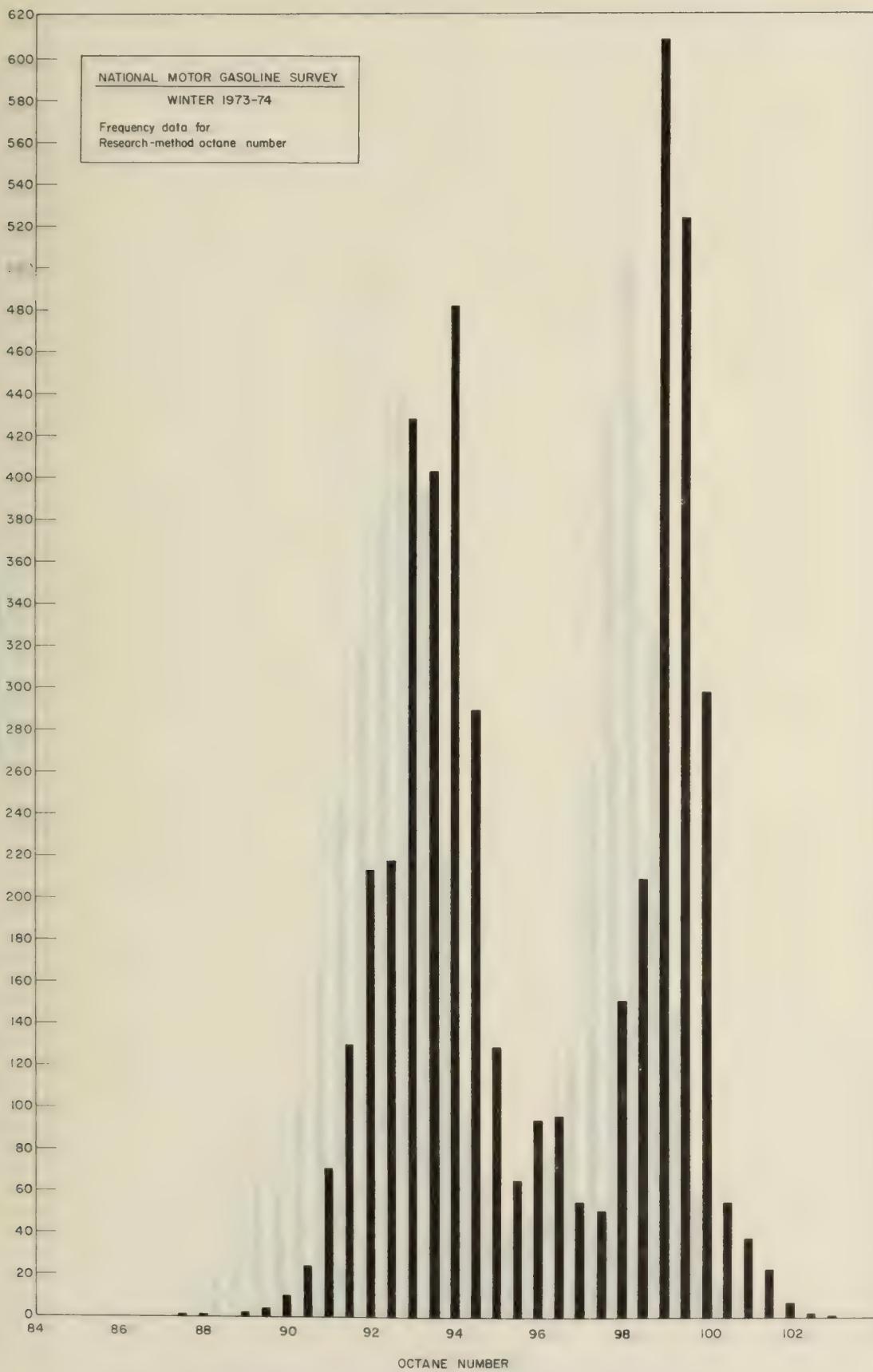


FIGURE 3.-Distribution of research-method octane numbers.



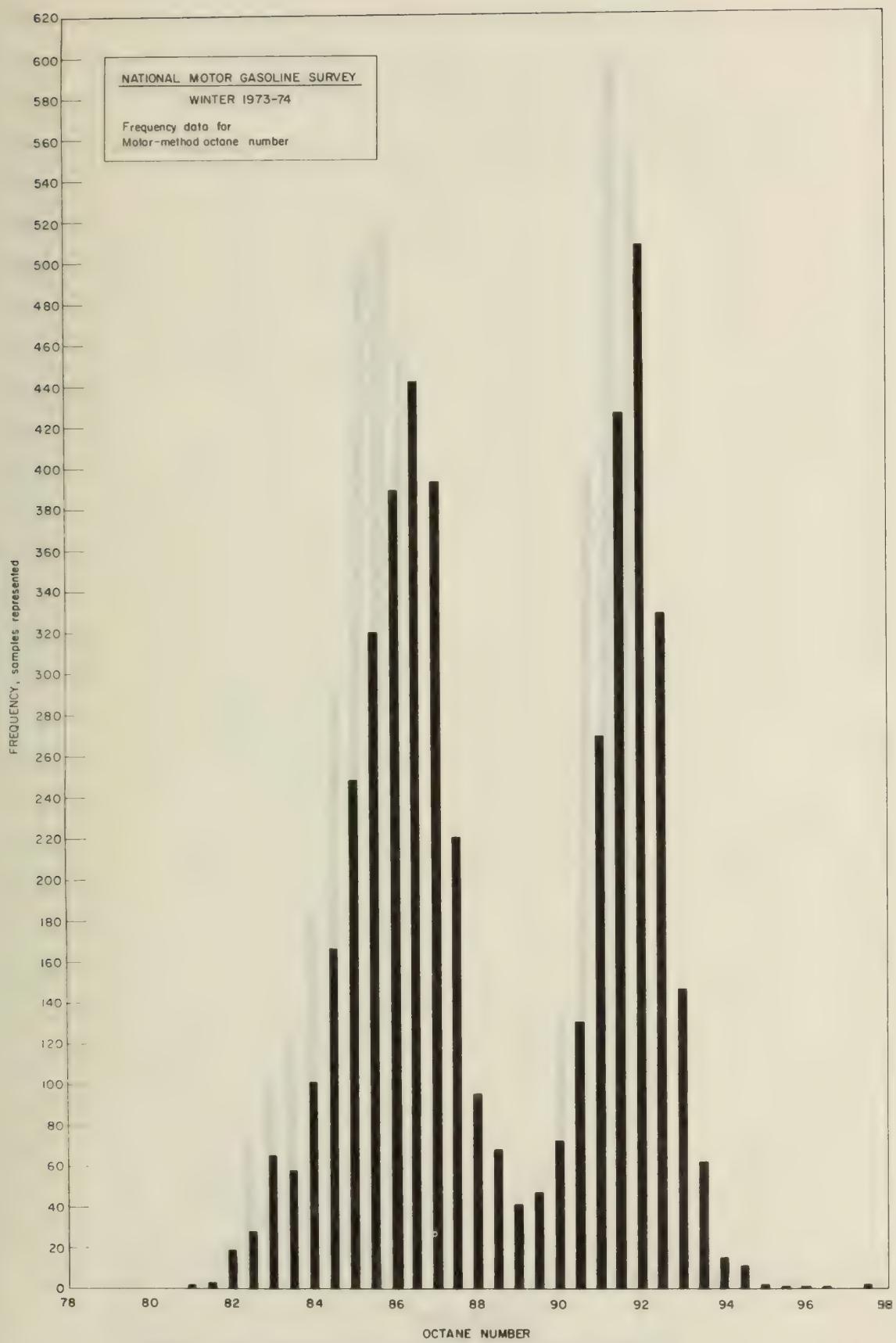


FIGURE 4.-Distribution of motor-method octane numbers.



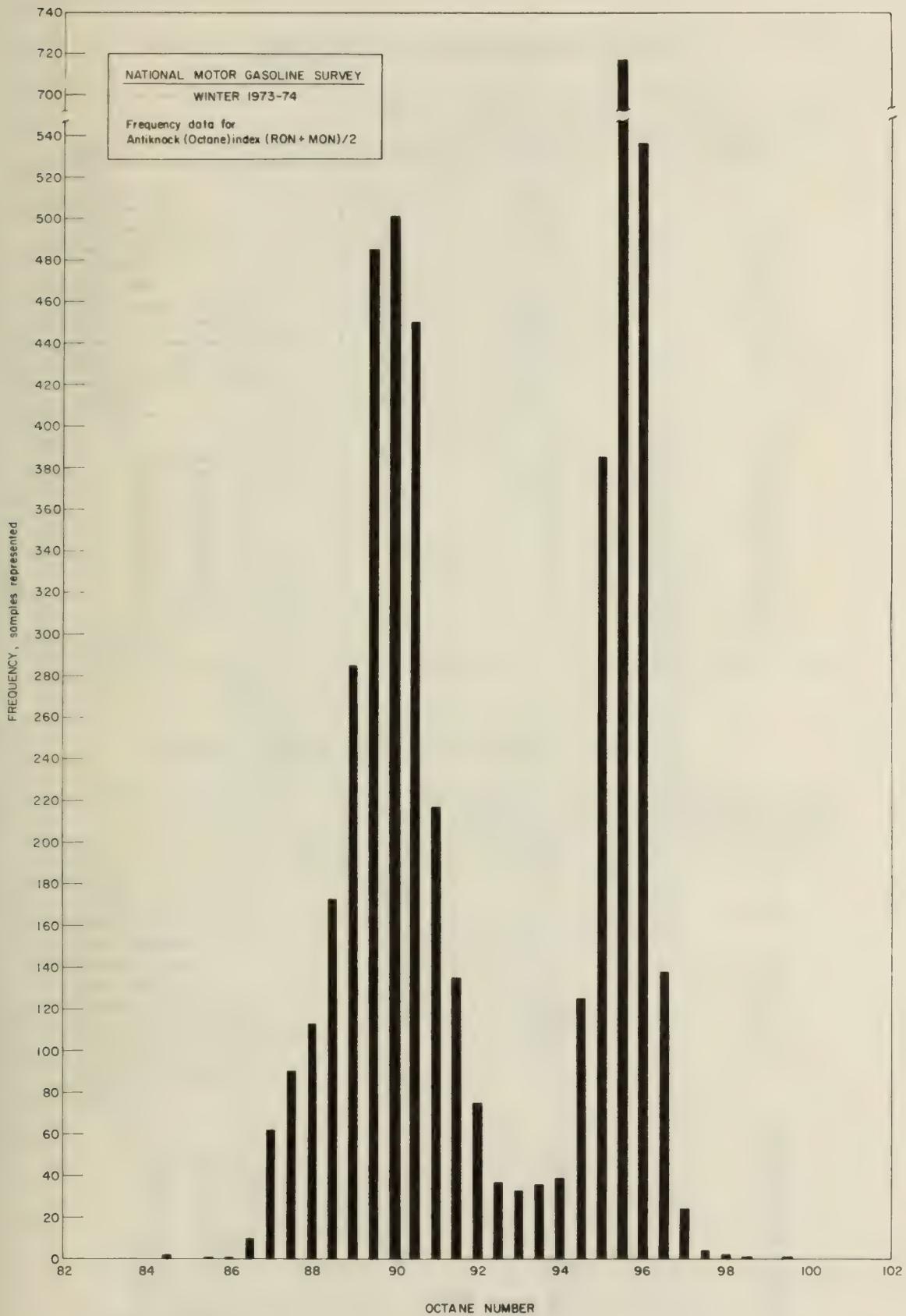


FIGURE 5.- Distribution of antiknock(octane) index (RON + MON)/2 .



TABLE 1. - Summary of values, motor gasoline survey, winter 1973-74

Test	ASTM method	Regular-price gasoline	Premium-price gasoline
		Average	Average
Gravity, °API	D287	62.7	63.5
Corrosion, No.	D130	1	1
Sulfur content, wt %	D1266	0.038	0.025
Gum, mg/100 ml	D381	1	1
Phosphorus, g/gal	D3231	0.002	0.001
Lead, g/gal	D526	1.67	2.21
Octane number, Research	D2699	93.4	99.1
Octane number, Motor	D2700	86.0	91.7
(Research + motor octane Nos.)/2		89.7	95.4
Reid vapor pressure, lb	D323	12.1	12.0
Vapor-liquid ratio of 20, °F	D439	121	123
Distillation	D86		
Temp, °F			
IBP		84	84
5% evaporated		95	96
10% Do.		107	109
20% Do.		128	133
30% Do.		150	159
50% Do.		200	209
70% Do.		255	250
90% Do.		329	318
95% Do.		363	354
End point		404	399
Residue, vol %		1.0	1.0
Loss, vol %		2.1	2.2

TABLE 2. - Summary of values, motor gasoline survey, winter 1972-73

Test	ASTM method	Regular-price gasoline	Premium-price gasoline
		Average	Average
Gravity, °API	D287	62.5	63.0
Corrosion, No.	D130	1	1
Sulfur content, wt %	D1266	0.038	0.023
Gum, mg/100 ml	D381	1	1
Phosphorus, g/gal	D3231	0.013	0.016
Lead, g/gal	D526	1.80	2.34
Octane number, Research	D2699	93.9	99.6
Octane number, Motor	D2700	86.4	92.2
(Research + motor octane Nos.)/2		90.2	95.9
Reid vapor pressure, lb	D323	12.2	12.1
Vapor-liquid ratio of 20, °F	D439		
Distillation	D86		
Temp, °F			
IBP		84	84
5% evaporated		95	95
10% Do.		108	109
20% Do.		128	132
30% Do.		150	158
50% Do.		200	209
70% Do.		257	251
90% Do.		334	319
95% Do.		366	352
End point		405	397
Residue, vol %		1.0	0.9
Loss, vol %		2.1	2.2

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS

DIST. 1 NORTHEAST  
MAINE, MASS., N.H., VT., AND NORTHERN N.Y.

## REGULAR-PRICE GASOLINE

ITEM	SAMPLES	GR. <sup>a</sup>	SULF, ASTM D267	PHOS. ASTM D381	LEAD, ASTM D323	OCTANE NUMBER	RVP, ASTM D439	DISTILLATION, ASTM D86						RES LOSS %									
								TEMPERATURE, F (CORRECTED TO 760 MM HG)															
								PERCENT EVAPORATED															
								IBP	5	10	20	30	50	70	95	EP							
1	2	63.9	-	-	-	2.17	94.4	86.2	90.3	-	-	-	-	-	-	-							
2	3	63.6	-	-	-	2.03	93.9	86.9	90.4	12.6	84	94	103	123	144	192	248	318	352	394	0.6	1.4	
3	4	63.6	0.060	-	1	2.03	93.6	86.5	90.1	12.0	81	101	110	130	152	197	254	346	368	427	1.0	2.6	
4	6	68.7	-	-	-	1.42	93.4	87.3	90.4	14.5	79	85	96	113	135	182	232	309	373	380	1.0	3.4	
5	7	62.0	-	-	-	1.18	94.2	86.2	90.2	12.5	121	64	92	106	129	158	214	277	351	380	415	1.2	2.7
6	4	62.7	-	-	-	2.01	93.9	87.0	90.5	10.2	133	89	93	117	139	147	208	255	337	375	405	0.8	1.7
7	8	65.7	.050	-	1	2.04	93.0	87.1	90.7	12.8	116	85	93	104	122	141	190	251	331	363	421	1.1	2.2
8	3	63.4	-	-	-	2.43	94.1	86.5	90.3	13.3	113	82	91	101	121	143	187	232	322	360	404	0.7	1.3
9	9	2.61.3	-	-	-	1.14	94.6	86.8	90.7	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	7	63.1	-	-	-	2.45	94.2	87.6	90.9	10.6	127	86	100	111	133	154	199	244	315	350	383	1.1	2.0
11	3	62.5	-	-	1	1.96	94.2	86.9	90.6	12.8	121	83	95	106	130	158	220	285	332	356	398	1.2	2.3
AVERAGE	SAMPLES	63.7	.055	-	1	1.89	94.0	86.8	90.4	12.4	120	84	94	106	127	148	199	253	329	364	403	1.0	2.2

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 DIST. I NORTHEAST--CONTINUED  
 MAINE, MASS., N.H., VT., AND NORTHERN N.Y.  
 PREMIUM-PRICE GASOLINE

ITEM	SAMPLES	GR. <sup>a</sup> ASTM D287	SULF. <sup>b</sup> ASTM D1266	GUM, <sup>c</sup> ASTM D381	LEAD, <sup>d</sup> ASTM D526	PHOS. <sup>e</sup> ASTM D3231	R+M ASTM D526	RVP, <sup>f</sup> ASTM D2700	20V/L ASTM D323 D439	DISTILLATION, ASTM D86														
										TEMPERATURE, F (CORRECTED TO 760 MM HG) PERCENT EVAPORATED														
										IBP	5	10	20	30	50	70	90	95	EP	%	RES LOSS			
12	3	53.0	8	-	-	-	0.02	100.9	90.1	95.5	12.8	119	82	94	102	122	147	217	258	308	333	392	0.6	0.9
13	3	62.2	-	-	-	-	2.41	99.2	92.3	95.8	12.2	120	82	93	103	124	148	206	260	319	344	398	0.5	1.5
14	4	61.0	0.040	-	1	-	2.41	99.3	91.8	95.6	12.8	121	82	94	106	133	162	215	259	330	348	404	0.9	3.1
15	7	66.7	-	-	-	-	1.49	99.4	91.2	95.3	14.5	110	80	87	98	114	134	192	232	290	325	378	1.3	2.8
16	7	61.3	-	-	-	-	1.82	99.0	90.9	95.0	13.0	119	82	89	105	132	161	214	259	315	365	393	1.1	3.2
17	3	60.2	-	-	-	-	1.93	99.7	92.3	96.0	12.7	119	75	86	97	123	161	220	270	328	368	406	0.8	1.8
18	9	61.5	.020	1	-	-	2.75	99.2	92.5	95.9	12.4	120	85	93	105	124	145	211	280	327	359	398	1.1	2.1
19	3	59.6	-	-	-	-	2.94	99.6	91.3	95.5	12.6	120	82	92	106	131	159	210	256	309	334	390	0.9	1.6
20	2	62.8	-	-	-	-	1.77	99.5	91.8	95.7	-	-	-	-	-	-	-	-	-	-	-	-	-	
21	7	59.5	-	-	-	-	2.62	100.9	91.9	96.4	11.9	123	89	97	114	135	157	204	253	322	359	408	1.2	2.8
22	6	61.8	-	-	-	-	2.75	99.8	91.1	95.5	12.3	121	86	96	110	132	151	202	256	324	351	381	1.2	2.2
23	3	63.7	-	-	-	-	2.44	99.2	91.6	95.4	13.0	116	84	92	101	124	147	198	245	305	328	380	0.7	1.3
AVERAGE	SAMPLES	61.2	.030	1	-	-	2.11	99.6	91.6	95.6	12.7	119	83	92	104	127	152	208	257	316	347	393	.9	2.1

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 DIST. 2 MID-ATLANTIC COAST  
 R.I., CONN., N.J., DEL., MD., VA., CENTRAL AND SOUTHERN N.Y., AND EASTERN PA.  
 AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

## REGULAR-PRICE GASOLINE

ITEM	SAM- PLES	GR. ASTM D287	SULF. ASTM D1266	GUM, ASTM D381	LEAD, ASTM D3231	OCTANE NUMBER RES, ASTM D526	RVP, ASTM D2699	20V/L ASTM D439	DISTILLATION, ASTM D86						RES LOSS %								
									TEMPERATURE, F IBP 5 10 20 30 50 70 90 95 EP			PERCENT EVAPORATED IBP 5 10 20 30 50 70 90 95 EP											
									R+N ASTM D2700	LB	F	IBP	5	10	20								
24	12	62.8	0.061	1	0.004	1.50	94.6	85.5	90.2	11.9	120	83	94	106	125	145	193	253	333	362	401	0.9	2.4
25	19	63.1	.024	1	.004	1.86	94.0	87.4	90.7	12.2	119	83	94	108	127	147	194	247	320	354	397	1.0	2.7
26	13	61.9	.045	1	.001	1.90	93.7	86.1	89.9	12.5	120	82	93	106	127	150	202	257	335	361	411	1.0	2.7
27	8	62.2	.035	-	-	1.69	93.5	86.0	89.8	12.1	120	80	93	104	123	146	197	258	339	371	419	1.0	2.1
28	23	66.1	.024	1	.003	1.71	93.6	87.2	90.4	13.4	114	81	87	102	121	143	190	247	330	349	394	1.0	3.4
29	21	61.5	.021	2	.002	.85	93.3	85.7	89.5	12.5	122	83	91	106	129	157	216	284	356	383	417	1.2	3.5
30	6	64.0	.025	-	-	1.58	94.7	87.4	91.1	12.7	116	83	94	103	120	140	188	251	322	350	388	1.0	2.2
31	18	63.5	.025	1	.003	2.09	94.0	87.1	90.6	12.1	120	84	93	106	125	147	196	263	335	364	395	1.0	2.6
32	26	64.1	.037	1	.002	1.51	93.9	86.6	90.3	12.6	119	83	92	104	124	146	200	258	328	362	403	1.0	2.7
33	5	62.4	.060	1	.001	1.71	94.0	85.7	89.9	13.9	115	87	95	106	125	147	199	252	318	341	382	1.0	3.0
34	18	61.9	.037	3	.003	1.43	94.3	86.7	90.5	13.3	116	80	88	101	122	146	206	275	356	388	425	1.1	3.2
35	26	62.2	.022	1	.002	1.79	94.4	87.2	90.8	11.1	126	86	98	113	135	158	205	256	316	342	388	1.0	2.4
36	7	64.0	.037	0	.001	3.01	94.3	88.3	91.3	12.6	117	84	93	106	124	144	194	258	324	345	386	1.1	2.2
37	2	62.7	.044	-	-	1.33	93.8	85.6	89.7	12.6	119	82	96	107	126	148	203	272	347	388	418	1.4	1.6
38	12	62.1	.047	2	.009	1.68	93.6	86.0	89.9	12.3	120	81	89	104	126	150	203	260	339	374	418	1.7	2.6
39	3	63.3	.037	-	.072	93.4	86.2	89.8	12.1	119	81	95	105	124	144	193	255	338	376	410	1.1	1.9	
AVERAGE	SAMPLES	63.0	.036	1	.003	1.71	94.0	86.5	90.3	12.5	119	83	93	105	125	147	199	259	334	363	403	1.0	2.6

TABLE 3. \* MOTOR GASOLINE SURVEY, WINTER 1973-74  
 DIST. 2 MID-ATLANTIC COAST--CONTINUED  
 R.I., CONN., N.J., DEL., MD., VA., CENTRAL AND SOUTHERN N.Y., AND EASTERN PA.  
 PREMIUM-PRICE GASOLINE

ITEM	SAM- PLES	GR. ASTH D287	SULF. ASTH D1266	GUM, ASTH D381	PHOS. ASTH D3231	LEAD, ASTH D526	OCTANE NUMBER	RVP, ASTM D323 LB	20V/L ASTM D439 LB	DISTILLATION, ASTM D86			RES. LOSS										
										TEMPERATURE, F (CORRECTED TO 760 MM HG)			PERCENT EVAPORATED										
										IBP	5	10	20	30	50	70	90	95	EP	X	X		
40	12	54.6	0.014	0	0.000	0.02	101.0	90.3	95.7	12.8	121	81	92	103	124	153	228	262	323	347	396	0.9	2.3
41	17	60.5	•012	1	•000	2.47	99.0	91.9	95.5	12.2	122	83	95	109	130	154	210	268	330	361	403	1.1	2.7
42	12	62.2	•028	1	•002	2.19	99.1	91.4	95.3	11.7	126	84	95	111	137	167	217	259	332	362	413	1.1	2.1
43	8	63.1	•031	-	-	2.16	98.9	91.5	95.2	13.1	120	84	94	106	131	160	216	257	332	378	410	•8	2.0
44	24	66.3	•018	1	•000	1.68	99.8	92.2	96.0	13.8	111	81	88	99	116	136	187	238	307	339	385	1.1	3.4
45	21	62.9	•013	1	•002	1.61	98.8	90.8	94.8	12.6	121	83	90	106	130	157	212	256	320	349	396	1.1	3.5
46	6	62.3	•015	-	-	2.14	98.7	91.2	95.0	12.4	121	83	94	105	127	152	212	257	321	353	407	•8	2.7
47	18	59.7	•013	0	•000	2.09	99.5	92.1	95.8	12.3	122	86	93	106	128	155	217	263	327	358	399	1.0	2.6
48	22	60.9	•019	1	•001	2.58	99.0	92.2	95.6	13.3	118	82	88	103	127	154	214	266	327	360	402	1.1	3.4
49	5	61.1	•024	1	•001	2.51	99.0	90.7	94.9	14.5	115	84	89	106	127	149	211	261	319	344	397	1.0	4.5
50	15	63.0	•023	1	•001	2.09	99.7	92.0	95.9	12.8	119	82	90	104	126	150	205	260	334	367	410	1.5	3.0
51	24	62.6	•014	1	•001	2.57	100.2	92.1	96.2	11.8	123	83	95	111	132	157	206	251	316	350	404	1.1	2.6
52	11	62.0	•036	1	•008	2.73	99.7	91.0	95.4	12.5	118	84	92	103	122	144	194	248	320	350	388	•8	2.6
53	3	62.3	•027	-	-	2.43	98.8	92.0	95.4	12.0	121	80	92	104	126	151	207	257	329	361	405	1.2	1.8
54	6	59.3	•028	0	•002	3.25	99.2	92.2	95.7	12.7	119	83	92	104	124	146	202	254	308	331	376	1.0	2.7
55	2	63.6	•023	-	-	1.97	98.9	91.4	95.2	12.3	122	82	94	106	131	163	217	257	331	371	414	1.2	2.3
56	10	63.4	•021	1	•004	2.24	98.9	91.4	95.2	12.9	118	81	90	102	124	152	206	248	324	360	407	1.0	4.1
AVERAGE	SAMPLES	61.8	•021	1	•002	2.16	99.3	91.6	95.5	12.7	120	83	92	105	127	153	209	257	324	355	401	1.0	2.9

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

## REGULAR-PRICE GASOLINE

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 DIST. 3 SOUTHEAST--CONTINUED  
 N.C., S.C., GA., FLA., ALA., AND EASTERN TENN.

## PREMIUM-PRICE GASOLINE

ITEM	SAMPLES	GR. API	SULF. ASTM D287	GUM, ASTM D381	LEAD, ASTM D3231	RES, ASTM D526	OCTANE NUMBER	RVP, 20V/L	DISTILLATION, ASTM DB6														
									MOT., R+M	ASTM D323	ASTM D439	TEMPERATURE, F (CORRECTED TO 760 MM HG)	PERCENT EVAPORATED										
									ASTM D2700	2	LB	IBP	5	10	20	30							
75	4	61.7	0.019	-	-	2.33	99.0	91.7	95.4	11.1	128	85	101	111	135	161	221	273	334	368	405	1.0	0.8
76	24	53.7	.014	-	-	.02	101.6	90.6	96.1	11.9	126	84	95	108	133	165	233	265	325	348	385	1.1	1.9
77	4	61.2	.010	1	0.003	2.40	98.8	91.8	95.3	12.2	123	87	98	109	131	157	214	266	325	356	394	1.0	2.3
78	3	63.3	.018	-	-	2.32	99.1	91.5	95.3	11.9	123	84	95	107	131	158	209	250	327	362	418	1.2	1.3
79	8	62.7	.023	1	-	2.07	98.7	91.3	95.0	11.4	127	84	97	112	137	165	214	257	329	352	410	1.0	2.4
80	13	63.7	.014	1	.001	1.96	99.5	92.4	96.0	11.9	123	85	96	109	129	154	206	246	299	331	375	.9	1.8
81	25	63.3	.020	-	-	1.66	99.2	91.3	95.3	11.5	125	85	97	111	133	159	210	253	320	352	394	1.0	1.9
82	14	61.0	.023	-	-	2.49	99.1	91.7	95.4	10.5	128	85	99	110	129	149	209	282	322	343	385	.8	1.3
83	25	60.3	.010	1	.001	1.99	99.7	92.3	96.0	11.8	127	84	95	111	137	167	225	266	328	355	394	1.1	2.4
84	7	63.8	.017	1	.002	2.42	99.0	92.1	95.6	11.8	122	80	96	106	126	148	208	257	315	346	390	1.0	1.8
85	6	63.3	.028	-	-	2.31	99.1	91.3	95.2	11.9	123	81	95	107	131	156	209	253	325	363	408	.9	1.2
86	21	61.0	.018	-	-	2.60	99.0	91.9	95.6	10.6	131	86	100	117	141	166	215	269	341	371	412	1.1	2.0
87	3	61.6	.017	-	-	2.27	99.6	92.2	95.9	10.7	126	86	100	110	129	151	203	257	323	358	412	1.1	1.4
88	29	63.9	.014	1	.001	2.64	99.7	92.3	96.0	11.7	126	86	98	113	138	166	218	260	320	349	393	1.0	2.1
89	9	62.3	.012	-	-	2.11	99.0	91.8	95.4	10.9	126	83	93	107	130	154	212	258	325	355	403	.8	1.4
90	6	62.5	.033	-	-	2.91	99.5	92.1	95.8	10.9	126	85	100	112	135	159	213	267	339	376	416	1.2	.8
91	5	61.5	.007	-	-	2.51	99.2	91.8	95.5	10.3	128	84	100	111	130	151	203	251	314	342	380	.9	1.1
92	2	62.1	-	-	-	2.55	99.4	91.8	95.6	-	-	-	-	-	-	-	-	-	-	-	-	-	
AVERAGE	SAMPLES	61.8	.017	1	.002	2.20	99.0	91.8	95.6	11.4	126	84	97	110	133	158	213	261	324	355	398	1.0	1.6

TABLE 3. • MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 DIST. 4 APPALACHIAN--CONTINUED  
 OHIO, W. VA., WESTERN N.Y., WESTERN PA., EASTERN KY., AND PART OF MD.

## PREMIUM-PRICE GASOLINE

ITEM	SAMPLES	GR. <sup>a</sup> ASTM D287	SULF. ASTM D1266	GUM, ASTM D381	PHOS. ASTM D526	LEAD, ASTM D3231	RES. ASTM D2699	OCTANE NUMBER R+M ASTM D2700	RVP, ASTM D439	20V/L ASTM D323 LB	DISTILLATION, ASTM D86												
											TEMPERATURE, F (CORRECTED TO 760 MM HG)												
											IBP	5	10	20	30	50							
110	8	53.9	0.012	1	0.000	0.04	100.9	90.4	11.7	126	82	96	106	129	161	234	268	330	352	392	1.0	1.7	
111	5	64.1	.035	1	.004	2.49	99.2	91.7	95.5	12.5	86	98	109	131	155	205	250	331	371	423	1.0	2.4	
112	15	61.9	.005	0	.001	2.42	99.2	92.1	95.7	12.0	83	95	108	130	156	208	260	324	358	410	1.0	2.3	
113	3	64.6	-	-	1.63	99.0	91.6	95.3	12.4	123	86	96	112	136	166	211	251	324	355	406	1.1	1.4	
114	1	64.1	.013	1	.001	2.38	98.4	92.0	95.2	12.2	84	94	109	133	158	203	245	323	358	424	1.0	4.0	
115	1	68.1	.010	3	-	1.18	98.5	92.0	95.3	14.2	78	91	101	121	149	200	237	307	338	391	1.1	2.9	
116	13	65.4	.025	2	.000	2.24	100.0	92.0	96.0	13.6	80	89	100	119	143	196	237	312	356	399	1.9	2.3	
117	17	65.6	.014	0	.000	2.07	99.3	91.8	95.6	13.0	84	93	106	130	157	208	248	321	355	400	1.0	3.0	
118	1	56.7	.010	0	-	3.17	99.0	-	49.5	10.5	86	103	124	153	179	229	275	331	357	400	1.0	2.0	
119	7	65.5	.006	0	.006	1.75	99.0	91.8	95.4	14.0	82	91	100	123	151	204	239	315	352	392	1.9	3.1	
120	6	64.2	-	-	-	-	98.9	91.1	95.0	11.8	85	97	107	127	151	209	250	321	358	408	6	2.1	
121	12	61.6	.014	0	.000	1.87	99.5	92.2	95.9	12.9	80	91	103	129	162	218	254	321	349	396	1.0	3.1	
122	18	62.7	.035	0	.001	2.30	98.6	91.8	95.2	12.9	120	82	94	108	131	161	211	251	320	367	402	1.2	3.1
123	13	62.0	.003	0	.006	1.51	98.5	91.7	95.1	13.9	79	88	98	118	142	196	256	322	352	399	1.1	3.1	
124	13	62.1	.010	4	.000	1.72	99.1	91.3	95.2	14.1	80	90	101	122	151	209	253	317	353	399	1.0	2.9	
125	19	62.9	.009	0	.000	2.67	100.0	92.0	96.0	11.8	84	96	110	132	156	207	251	324	363	413	1.2	2.5	
126	7	66.0	.030	1	.008	1.54	98.6	92.1	95.4	13.4	118	83	94	106	134	163	208	241	327	365	410	1.0	2.5
AVERAGE		63.0	.015	1	.002	1.94	99.2	91.7	95.5	12.8	120	83	94	106	129	157	209	251	322	356	404	1.0	2.6

## DIST. 5 MICHIGAN

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

## REGULAR-PRICE GASOLINE

ITEM	SAM- PLES	GR. <sup>a</sup> - ASTM D287	SULF. <sup>b</sup> ASTM D1266	GUM. <sup>c</sup> ASTM D381	PHOS. <sup>d</sup> ASTM D526	LEAD, ASTM D3231	OCTANE NUMBER	DISTILLATION, ASTM D86															
								RES, ASTM D2699	MOT, ASTM D2700	R+M --- D439	DISTILLATION, F (CORRECTED TO 760 MM HG)												
											ASTM D439	TEMPERATURE, F	PERCENT EVAPORATED	RES	LOSS								
									IBP	5	10	20	30	50	70	95	EP						
127	14	63.5	0.056	2	0.003	2.12	95.4	86.3	90.9	12.2	11.9	83	92	105	125	148	247	320	350	390	0.9	2.0	
128	5	62.7	.032	1	.000	1.56	94.4	86.0	90.2	13.1	11.6	80	90	103	125	147	198	249	327	370	421	.9	2.4
129	3	"	"	"	"	"	93.2	86.4	89.8	11.9	12.0	82	90	103	125	148	197	250	321	355	400	.8	2.2
130	3	60.5	.035	2	.004	1.28	93.4	85.2	89.3	11.9	12.2	80	93	105	127	152	208	267	343	379	433	.9	1.9
131	10	63.0	.021	1	.002	.62	93.4	85.5	89.5	13.0	11.7	81	88	100	120	146	203	256	333	368	409	1.0	2.7
132	57	63.8	.040	1	.000	2.26	93.2	86.6	89.9	14.2	11.5	84	93	106	129	153	208	266	354	388	414	.5	1.1
133	6	61.6	.027	1	.006	.67	94.0	84.9	89.5	14.4	11.2	75	79	95	117	144	206	267	343	378	417	.9	3.8
134	14	63.6	.026	1	.003	1.62	94.7	87.4	91.1	12.3	11.9	81	91	103	122	143	197	255	323	354	395	.8	2.0
135	15	63.6	.044	1	.003	.80	93.4	86.1	89.8	12.8	11.7	82	90	103	124	148	199	247	317	347	397	.9	2.5
136	15	62.4	.030	3	.017	.71	93.8	85.6	89.7	13.4	11.5	80	91	104	124	147	195	249	326	369	403	1.0	2.0
137	7	63.4	.028	2	.003	1.41	93.9	86.5	90.2	15.0	10.8	75	79	92	114	138	193	253	345	389	414	.9	4.6
138	26	63.4	.023	2	.005	2.39	94.3	86.7	90.5	12.2	12.1	83	91	107	130	154	202	249	305	330	375	.9	2.9
139	6	62.7	.036	1	.007	.91	93.4	85.4	89.4	12.9	11.6	80	87	98	119	145	200	258	332	368	410	.9	2.6
140	1	62.2	.034	2	.000	1.06	93.6	85.8	89.7	12.0	12.0	80	87	102	122	148	201	254	330	364	414	1.0	3.0
141	1	62.6	.061	1	.000	1.02	92.8	85.3	89.1	11.4	12.2	76	89	102	120	143	202	255	329	364	420	1.0	2.0
AVERAGE	SAMPLES	62.8	.035	2	.004	1.32	93.8	86.0	89.9	12.8	11.7	80	89	102	123	147	200	255	330	365	407	.9	2.5

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

## REGULAR-PRICE GASOLINE

ITEM	SAH- PLES	GR. <sup>a</sup> ASTM D287	SULF. <sup>b</sup> ASTM D1266	GUM, <sup>c</sup> ASTM D381	PHOS., <sup>c</sup> ASTM D3231	LEAD, <sup>c</sup> ASTM D526	OCTANE NUMBER	RVP, <sup>d</sup> ASTM D323 LB	20V/L ASTM D439	DISTILLATION, ASTM D86			RES LOSS %										
										TEMPERATURE, F (CORRECTED TO 760 MM HG)													
										IBP	5	10	20										
157	7	63.2	0.057	1	0.000	2.40	95.2	86.4	90.8	12.8	116	83	90	101	121	144	194	244	314	343	391	0.9	2.9
158	5	60.5	0.041	1	0.001	1.27	93.6	85.5	89.6	11.9	124	87	96	109	131	156	211	263	341	373	422	1.1	2.5
159	2	61.6	0.063	-	-	0.99	93.3	86.3	89.8	13.3	114	84	92	99	118	141	191	247	333	368	404	1.2	1.8
160	2	58.7	0.032	-	-	1.22	93.4	86.3	89.9	12.8	114	76	90	102	126	153	211	270	346	390	428	1.1	2.4
161	2	62.8	0.051	-	-	1.72	93.8	86.5	90.2	13.6	115	80	92	102	121	145	199	251	321	365	406	0.9	2.1
162	2	63.3	0.047	-	-	1.53	95.0	88.5	91.8	13.7	112	76	88	97	115	138	194	246	336	374	424	1.0	3.0
163	2	62.2	0.030	2	0.002	1.35	93.0	86.2	89.6	13.7	112	78	87	97	114	139	194	252	287	387	410	1.2	3.8
164	4	64.5	0.054	-	-	1.08	94.2	86.1	90.2	12.7	117	81	92	100	118	140	202	256	327	360	396	0.8	1.5
165	7	64.5	0.034	2	0.000	1.87	94.3	87.3	90.8	12.5	117	82	89	101	119	139	191	256	326	358	404	1.0	2.7
166	8	63.1	0.033	1	0.001	1.18	93.2	86.4	89.8	13.4	114	79	87	100	119	140	192	245	320	356	389	1.0	3.0
167	7	63.7	0.014	0	0.000	2.45	94.2	86.9	90.6	12.5	118	84	91	104	123	146	195	246	310	337	380	0.8	3.1
168	2	63.0	0.043	-	-	1.59	93.7	86.3	90.0	12.4	117	78	87	99	119	147	198	250	330	375	400	0.8	3.2
AVERAGE		62.6	0.042	1	0.001	1.55	93.9	86.6	90.3	12.9	116	81	90	101	120	144	198	252	323	366	405	1.0	2.7

SAMPLES 50

TABLE 3. \* MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

## PREMIUM-PRICE GASOLINE

ITEM	SAMPLES	GR. SULF. ASTM D287	SULF. ASTM D1266	GUM, ASTM D381	PHOS. ASTM D231	LEAD, ASTM D526	RES, ASTM G/GAL	OCTANE NUMBER R+M ASTM D2699	DISTILLATION, ASTM D86															
									TEMPERATURE, F (CORRECTED TO 760 MM HG)			RES LOSS %												
									PERCENT EVAPORATED			5	10	20	30	50	70	90	95	EP				
									LB	F	IBP													
169	7	60.9	0.017	0	0.000	1.93	0	99.9	92.1	96.0	12.4	120	83	90	104	127	153	206	243	306	337	389	0.9	2.6
170	4	65.4	0.013	1	0.001	2.43	1	99.2	92.6	95.9	12.6	119	86	95	109	127	155	208	241	308	340	395	.9	2.4
171	2	65.9	0.049	-	-	1.81	-	98.5	91.7	95.1	12.3	124	78	96	113	139	170	213	241	320	374	414	1.1	2.4
172	2	63.7	0.008	-	-	2.59	-	99.0	92.9	96.0	12.6	120	80	95	110	134	156	198	231	310	354	400	1.0	3.0
173	2	66.0	0.015	-	-	2.22	-	98.9	92.5	95.7	13.2	117	76	90	102	131	160	204	234	309	347	388	1.0	3.0
174	2	65.6	0.042	-	-	1.38	-	98.5	92.2	95.4	12.0	124	78	95	110	138	170	210	239	313	362	400	1.0	3.0
175	2	66.5	0.001	3	0.002	1.51	0.001	99.0	92.6	95.8	14.3	113	75	99	102	120	146	198	233	255	349	380	1.0	3.5
176	4	66.5	0.031	-	-	1.75	-	99.0	91.4	95.2	12.5	119	63	94	105	124	148	201	237	311	351	399	.8	1.7
177	7	61.8	0.013	1	0.002	1.72	1	99.6	92.5	96.1	12.2	123	83	92	107	135	166	215	245	302	337	390	1.0	2.7
178	9	67.5	0.038	1	0.001	1.49	1	98.1	91.8	95.0	13.5	117	82	89	103	130	160	204	229	296	353	398	.9	3.7
179	7	56.2	0.013	0	0.000	2.47	0	99.6	92.2	95.9	11.8	127	85	97	118	147	174	211	241	286	312	359	.9	3.0
180	2	65.2	0.030	-	-	2.12	-	98.8	92.6	95.7	11.8	116	84	96	107	137	165	211	242	307	345	404	1.1	1.9
AVERAGE SAMPLES		64.3	.023	1	.0001	1.95	99.0	92.3	95.7	12.6	120	81	93	108	133	160	207	238	302	347	393	1.0	2.6	

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED.

ITEM	SAM- PLES	GR. <sup>o</sup> ASTM D287	SULF, ASTM D1266	GUM, ASTM D3231	PHOS., ASTM D3231	LEAD, ASTM D526	OCTANE NUMBER	RVP/ ASTM D439	20V/L ASTM D323 LB	DISTILLATION, ASTM D86													
										TEMPERATURE, F (CORRECTED TO 760 MM HG)			PERCENT EVAPORATED										
										5	10	20	30	50	70								
181	8	63.0	0.052	2	0.002	2.21	94.9	86.3	90.6	12.1	84	97	108	128	152	198	247	317	352	398	1.0	1.5	
182	2	60.8	0.050	-	-	2.04	93.0	85.3	89.2	13.2	85	95	110	140	166	219	270	342	386	434	.9	2.1	
183	8	60.6	0.040	-	-	-	93.3	85.7	89.5	12.8	84	94	105	127	150	207	264	355	389	427	1.0	1.7	
184	3	59.9	0.068	-	-	1.44	93.8	84.9	89.4	12.7	81	91	103	126	155	214	280	355	381	412	1.2	1.8	
185	3	59.3	0.030	-	-	1.38	93.6	85.7	89.7	10.8	81	91	101	115	139	171	223	277	344	376	406	1.4	1.1
186	6	59.0	0.052	-	-	1.61	93.8	85.4	89.6	12.0	85	98	110	138	165	219	277	355	387	414	1.0	1.6	
187	3	63.0	0.035	-	-	1.57	92.1	85.2	88.7	10.5	87	100	112	133	158	201	249	328	369	420	1.0	1.5	
188	5	63.5	0.056	-	-	1.39	93.9	86.3	90.1	12.8	81	92	101	121	144	202	267	338	379	406	1.3	1.2	
189	6	63.6	0.028	-	-	1.54	93.3	86.3	89.8	12.6	84	97	108	127	148	191	243	320	360	401	1.3	1.2	
190	3	61.2	0.026	-	-	1.79	94.0	86.1	90.1	10.9	84	100	110	135	162	204	252	332	365	424	1.1	.9	
191	10	60.9	0.026	3	0.002	1.38	93.6	86.0	89.8	12.5	81	97	110	130	155	208	266	345	382	421	1.1	2.1	
192	6	62.9	0.048	-	-	1.21	94.0	85.7	89.9	12.7	118	85	95	106	123	147	201	259	337	373	417	1.1	2.1
193	3	59.3	0.025	-	-	1.21	94.1	86.0	90.1	10.7	131	86	99	114	139	167	224	277	341	365	408	1.0	1.0
194	11	62.9	0.028	0	0.002	1.53	94.6	87.1	90.9	12.4	120	83	96	105	125	148	205	262	331	366	401	1.1	1.8
195	4	63.0	0.035	0	0	1.43	94.1	85.9	90.0	13.6	116	84	96	106	125	151	200	241	309	332	382	.9	1.9
196	2	59.0	0.012	-	-	1.20	94.4	86.5	90.5	10.2	133	85	105	116	139	163	222	272	334	366	416	1.2	.8
197	3	62.3	0.037	-	-	1.70	93.3	86.4	89.9	12.2	121	81	95	107	128	157	207	251	323	356	406	.7	1.3
198	9	62.7	0.032	-	-	1.45	93.7	86.0	90.1	13.9	115	81	92	103	126	148	203	271	368	394	433	1.2	1.1
199	11	64.0	0.020	1	0.002	2.74	94.0	87.4	90.7	11.8	123	83	97	110	133	156	200	254	301	333	382	.9	1.4
200	3	61.6	0.047	-	-	1.91	93.1	85.7	89.4	14.3	113	82	91	98	118	144	204	263	347	392	428	1.0	1.5
201	2	62.3	0.043	-	-	2.07	94.4	85.8	90.1	13.0	118	80	93	103	125	155	208	270	352	377	420	1.0	1.5

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED  
 DIST. 7 CENTRAL MISSISSIPPI--CONTINUED  
 WESTERN KY., SOUTHERN IND., SOUTHERN ILL., AND EASTERN MO.

## PREMIUM-PRICE GASOLINE

ITEM	SAM- PLES	GR. ASTM D287	SULF, ASTM D1266	GUM, ASTM D381	PHOS., ASTM D526	LEAD, ASTM D323	RES, ASTM D2699	OCTANE NUMBER	RVP, 20°/L			DISTILLATION, ASTM D86			RES LOSS %								
									MOT, ASTM D2700	RPM, ASTM D439	ASTM D439 LB	TEMPERATURE, F (CORRECTED TO 760 MM HG)	PERCENT EVAPORATED	TEMPERATURE, F									
									IBP	5	10	20	30	50									
202	8	62.7	0.014	3	0.002	2.11	99.6	91.6	95.6	12.1	123	86	98	110	134	160	211	248	308	340	381	1.1	1.7
203	2	61.4	.032	-	-	2.22	99.3	91.7	95.5	11.1	126	80	95	108	130	157	213	267	351	398	424	1.5	1.0
204	8	63.7	.031	-	-	1.84	98.5	91.5	95.0	12.8	118	82	92	104	126	152	204	248	326	369	410	1.2	1.7
205	3	65.2	.033	-	-	2.81	99.4	93.0	96.2	13.0	121	85	99	114	145	174	208	237	320	366	402	.9	2.6
206	3	66.3	.042	-	-	2.34	99.4	91.2	95.3	11.4	126	87	101	115	140	167	208	254	334	365	404	1.2	1.3
207	6	64.4	.033	-	-	2.77	99.1	92.6	96.0	11.3	130	86	103	120	150	177	214	249	331	377	407	1.1	1.5
208	2	66.6	.027	-	-	2.81	99.4	92.5	96.0	11.8	124	85	98	111	135	161	208	242	309	355	404	.9	1.5
209	3	66.1	.033	-	-	2.42	99.2	92.2	95.7	12.7	118	84	92	102	124	150	201	242	321	359	416	.8	2.2
210	5	67.1	.042	-	-	1.68	99.6	91.7	95.7	12.9	118	82	94	103	123	145	201	237	304	346	393	1.0	1.0
211	6	62.4	.036	-	-	2.48	99.3	91.7	95.5	11.4	126	85	98	111	135	162	213	253	329	365	402	1.1	.9
212	3	64.4	.047	-	-	2.47	99.9	93.2	96.6	10.1	133	88	105	119	149	174	208	250	316	355	406	.9	1.1
213	10	64.2	.010	2	.002	1.51	98.8	92.1	95.5	12.5	121	83	97	110	132	158	207	247	316	355	395	1.1	2.1
214	6	68.3	.037	-	-	1.69	99.2	91.2	95.2	12.2	119	83	95	104	123	144	197	231	311	362	404	.6	1.7
215	3	66.6	.041	-	-	2.32	99.2	91.2	95.2	11.4	125	84	99	111	138	165	207	250	326	356	404	1.2	1.3
216	11	61.8	.023	0	.002	1.36	99.9	92.8	96.4	12.4	123	80	94	108	137	171	216	244	295	330	376	1.0	2.3
217	4	67.6	.035	0	-	1.66	98.9	91.7	95.3	13.3	119	82	98	109	134	163	209	243	289	352	389	1.0	3.0
218	3	60.4	.010	-	-	1.78	99.2	91.2	95.2	11.5	127	86	99	113	141	169	214	259	318	368	408	1.0	1.0
219	3	60.3	.018	-	-	2.60	99.5	91.1	95.3	11.7	121	86	99	109	127	147	195	254	308	336	386	1.0	.5
220	9	62.8	.029	-	-	1.99	99.2	92.0	95.6	13.3	117	80	90	101	126	154	209	252	319	369	409	1.2	1.9
221	11	60.7	.014	4	.002	2.68	99.8	91.6	95.7	12.2	124	83	95	108	134	164	219	262	311	341	387	.9	1.5
222	3	65.4	.017	-	-	1.11	98.3	91.9	95.1	12.4	121	84	96	110	134	160	206	242	319	361	406	1.1	.9
223	2	64.4	.010	-	-	2.51	99.3	92.7	96.0	12.3	123	84	97	110	137	166	211	246	313	348	406	.8	2.2
AVERAGE SAMPLES	114	64.2	.028	2	.002	2.14	99.3	91.9	95.6	12.1	123	84	97	110	134	161	208	248	317	359	401	1.0	1.6

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED  
 DIST. & LOWER MISSISSIPPI  
 MISS., LA., EASTERN AND SOUTHERN ARK., AND WESTERN TENN.

## REGULAR-PRICE GASOLINE

ITEM	SAMPLES	GR.-%	SULF., ASTM D287	GUM, ASTM D381	PHOS., ASTM D3231	LEAD, ASTM D526	OCTANE NUMBER	RVP, ASTM D323 LB	20V/L	DISTILLATION, ASTM D86						RES. %	LOSS %													
										TEMPERATURE, F (CORRECTED TO 760 MM HG)			PERCENT EVAPORATED																	
										IBP F	5 IBP	10 50	20 30	30 50	95 90	EP														
224	10	63.4	0.032	-	-	2.45	94.7	90.7	12.2	120	-	-	-	-	-	83	96	108	129	152	199	258	340	378	414	0.9	1.7			
225	1	64.0	0.034	-	-	1.92	93.8	86.4	90.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
226	3	63.5	0.043	-	-	2.36	93.0	86.4	89.7	14.4	113	80	92	104	124	149	196	247	343	383	420	1.0	1.0	-	-	-	-	-	-	
227	15	65.8	0.036	1	0.000	2.05	93.2	87.6	90.4	13.4	115	85	96	105	125	147	197	259	341	383	408	1.0	2.0	-	-	-	-	-	-	
228	3	62.9	0.056	-	-	2.00	93.7	86.6	89.9	12.3	120	80	93	105	125	149	202	265	348	388	424	1.2	1.3	-	-	-	-	-	-	
229	6	64.0	0.048	1	-	1.98	93.7	86.8	90.3	12.4	120	82	99	107	128	149	199	255	331	346	409	9	1.8	-	-	-	-	-	-	
230	4	-	-	-	-	-	94.6	87.6	91.1	12.7	121	85	97	110	133	160	210	266	350	378	406	1.0	1.4	-	-	-	-	-	-	
231	13	64.2	0.027	-	-	1.70	93.9	87.0	90.5	12.8	117	83	96	107	126	146	192	249	310	335	379	1.0	1.0	-	-	-	-	-	-	
232	14	62.0	0.043	-	-	1.59	93.4	86.5	90.0	11.5	125	85	98	110	131	156	207	259	330	357	407	1.0	1.6	-	-	-	-	-	-	
233	10	64.7	0.048	0	-	1.92	93.6	86.7	90.2	12.4	119	85	97	109	130	150	194	246	316	342	410	1.0	1.7	-	-	-	-	-	-	
234	3	65.1	-	-	-	-	94.4	87.5	91.0	12.0	120	86	99	109	126	146	192	247	324	361	405	1.6	1.8	-	-	-	-	-	-	
235	14	62.5	0.024	-	-	2.02	94.0	86.9	90.5	12.8	119	80	94	105	128	156	206	265	346	376	413	9	1.5	-	-	-	-	-	-	
236	13	63.9	0.043	-	-	2.15	93.8	86.5	90.2	12.3	121	84	98	109	131	155	203	266	335	363	395	9	1.2	-	-	-	-	-	-	
237	8	62.6	0.024	-	-	1.48	93.8	86.4	90.1	10.6	127	86	100	113	132	153	199	253	322	359	405	6	1.2	-	-	-	-	-	-	
238	3	62.5	0.076	-	-	2.73	90.4	85.9	90.2	12.3	123	84	100	112	134	158	210	267	355	388	420	6	9	-	-	-	-	-	-	
239	14	63.7	0.034	-	-	2.42	94.3	87.1	90.7	11.7	122	83	99	110	129	152	197	242	307	333	385	9	1.3	-	-	-	-	-	-	
240	3	63.1	0.075	-	-	1.54	93.8	86.2	90.0	13.0	116	82	96	108	126	148	199	257	316	349	406	6	9	-	-	-	-	-	-	
241	2	65.7	0.013	-	-	2.11	93.1	87.4	90.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
AVERAGE	SAMPLES	63.7	0.041	1	.000	2.03	93.8	86.8	90.3	12.4	120	83	97	108	129	152	200	256	332	364	407	9	1.4	-	-	-	-	-	-	-

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 DIST. 8 LOWER MISSISSIPPI--CONTINUED  
 MISS., LA., EASTERN AND SOUTHERN ARK., AND WESTERN TENN.  
 AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED.

## PREMIUM-PRICE GASOLINE

ITEM	SAH- PLES	GR. WT	ASTM D287 API	SULF, ASTM D1266	GUM, ASTM D3231	PHOS., ASTM D381	LEAD, ASTM D526	OCTANE RES, ASTM D2700	NUMBER R+M ASTM D2700	RVP, ASTM D323 LB	20V/L ASTM D439 F	DISTILLATION, ASTM D86						RES LOSS					
												TEMPERATURE, F (CORRECTED TO 76.0 MM HG)											
												IBP	5	10	20	30	50						
242	10	54.9	0.012	-	-	0.02	101.3	90.5	95.9	12.3	121	83	91	102	121	149	228	266	332	359	395	0.9	1.9
243	1	63.1	.022	-	-	2.34	99.3	91.9	95.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
244	3	66.7	.029	-	-	2.12	99.3	92.5	95.9	11.3	122	82	90	102	124	151	202	238	328	389	418	1.0	2.0
245	14	64.9	.038	0	0.000	1.95	99.0	91.9	95.5	13.2	118	82	97	106	128	156	207	255	335	366	399	1.0	1.0
246	3	63.9	.019	-	-	2.19	99.6	91.6	95.6	12.7	120	80	96	106	130	157	208	250	334	382	412	1.0	1.0
247	5	65.0	.032	1	-	2.23	99.4	91.4	95.4	12.2	123	83	96	111	135	162	209	247	327	362	401	1.1	1.9
248	9	60.9	.023	-	-	1.82	99.3	91.5	95.4	12.2	126	82	97	111	138	173	230	265	320	344	393	1.0	1.4
249	13	64.6	.013	-	-	1.78	99.7	92.3	96.0	12.6	120	81	96	109	131	155	204	237	287	318	367	9	1.1
250	14	61.6	.011	-	-	2.08	99.0	91.8	95.4	11.9	124	83	97	110	132	158	214	257	321	349	403	1.0	1.3
251	10	63.7	.050	0	-	2.24	99.4	91.7	95.6	12.6	119	84	94	107	127	149	199	242	315	344	405	1.0	1.8
252	3	64.9	-	-	-	99.6	92.2	95.9	12.1	125	86	99	113	137	165	217	254	340	381	419	47	2.4	
253	14	60.0	.015	-	-	1.87	99.7	92.0	95.9	12.4	124	83	96	108	134	167	223	265	330	358	400	1.0	1.5
254	13	63.6	.019	-	-	2.68	99.5	92.4	96.0	12.8	120	82	96	107	130	155	208	249	308	336	382	9	1.3
255	8	62.1	.018	-	-	1.98	99.1	91.2	95.2	11.5	125	83	96	108	130	166	213	255	325	373	413	8	1.5
256	1	59.0	-	-	-	2.49	98.6	91.5	95.1	11.2	125	76	-	104	130	-	213	-	347	-	421	1.0	3.0
257	6	64.0	.036	-	-	3.05	98.7	90.8	94.8	12.5	121	82	95	105	128	158	210	255	338	380	419	1.0	1.5
258	14	62.4	.009	-	-	2.90	99.8	92.1	96.0	11.7	125	80	99	112	138	167	214	255	310	337	380	9	1.5
259	3	63.3	.016	-	-	1.89	99.7	92.1	95.9	12.6	116	82	92	100	119	141	195	232	285	332	404	7	1.3
260	2	64.6	.013	-	-	2.66	99.6	92.3	96.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
AVERAGE	SAMPLES	62.8	.022	0	.000	2.13	99.5	91.8	95.7	12.2	122	82	95	107	130	158	211	251	322	357	402	.9	1.6

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED  
 DIST. 9 NORTH PLAINS  
 MINN., N. DAK., AND S. DAK.

## REGULAR-PRICE GASOLINE

ITEM	SAM- PLES	GR, ASTM D287	SULF, ASTM D1266	GUM, ASTM D381	PHOS, ASTM D526	LEAD, ASTM D231	OCTANE NUMBER	RVP, ASTM D323	20V/L ASTM D439	DISTILLATION, ASTM D86													
										RES, MG	MOT, ASTM D2692	R+M ASTM D2700	LB G/GAL	TEMPERATURE, F (CORRECTED TO 760 MM HG)			RES LOSS						
														IPB	5	10	20	30	50	70	95	EP	%
261	7	64.3	0.070	-	-	1.88	92.5	84.8	88.7	13.3	114	88	95	108	126	144	184	229	292	321	360	1.1	2.4
262	1	63.0	-	-	-	2.26	92.1	86.1	89.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
263	3	63.4	.062	-	-	2.02	92.4	85.3	88.9	12.7	114	82	91	102	116	134	178	232	308	343	396	1.1	1.9
264	2	65.1	.046	-	-	2.02	92.8	85.0	88.9	12.3	114	86	94	101	116	131	172	217	301	331	386	1.3	1.7
265	6	63.1	.053	-	-	1.77	92.0	85.0	88.6	13.0	116	90	97	106	125	142	190	243	321	355	407	1.9	2.1
266	3	63.8	.034	-	-	1.42	92.5	85.0	88.8	11.3	122	90	100	111	130	146	189	242	324	348	410	1.2	1.6
267	3	63.9	.082	-	-	1.57	92.7	85.5	89.5	12.3	118	82	94	104	122	143	191	245	312	357	400	1.9	1.1
268	3	64.6	.037	-	-	1.69	93.0	86.1	89.6	11.6	122	84	98	108	128	150	196	248	315	371	416	1.7	1.8
269	3	63.6	.075	1	-	1.58	92.5	85.0	88.8	12.8	116	83	95	102	119	138	187	242	316	335	400	1.7	1.8
270	2	64.0	-	-	-	1.63	92.4	85.6	89.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
271	7	63.7	.068	-	-	1.69	92.1	84.7	88.4	13.1	117	85	94	108	128	149	199	250	337	381	422	1.1	2.0
272	2	61.7	.070	-	-	2.27	92.7	85.6	89.2	12.7	116	82	89	118	140	195	250	319	361	406	1.1	1.9	
273	2	63.3	.040	-	-	1.86	92.7	85.2	89.0	11.1	124	85	96	106	126	154	201	249	320	350	410	1.2	1.8
AVERAGE	SAMPLES	63.7	.058	1	-	1.82	92.5	85.3	88.9	12.4	116	85	95	105	123	143	189	241	315	350	401	1.0	1.8

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 DIST. 9 NORTH PLAINS--CONTINUED  
 DIST. 9 MINN., N. DAK., AND S. DAK.

## PREMIUM-PRICE GASOLINE

ITEM	SAMPLES	GR., ASTM D287	SULF., ASTM D1266	GUM, ASTM D381	PHOS., ASTM D526	LEAD, ASTM D3231	RES., ASTM D2699	OCTANE NUMBER R+M ASTM D2700	RVP/ 20V/L ASTM D439	DISTILLATION, ASTM D86														
										TEMPERATURE, °F (CORRECTED TO 760 MM HG) PERCENT EVAPORATED														
										IBP	5	10	20	30	50									
274	7	68.9	0.024	-	-	-	1.84	99.9	91.5	95.7	13.5	113	86	94	105	122	143	187	230	297	328	375	1.1	2.4
275	1	69.6	-	-	-	-	2.34	98.9	92.7	95.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
276	3	68.8	.059	-	-	-	2.67	99.1	92.4	95.8	11.8	124	84	98	113	139	168	201	229	307	361	408	1.0	2.0
277	3	66.3	.032	-	-	-	2.28	98.9	91.8	95.4	12.0	124	84	100	112	137	166	208	244	337	380	422	.6	.9
278	2	69.4	.061	-	-	-	2.75	99.4	92.3	95.9	12.4	120	84	100	111	132	158	198	229	293	332	394	1.0	1.5
279	3	64.6	.008	-	-	-	2.80	99.3	94.7	97.0	11.0	134	86	102	123	160	192	226	256	329	357	406	1.3	1.7
280	7	66.5	.045	-	-	-	2.55	99.1	92.9	96.0	12.3	124	69	100	116	147	170	206	243	314	352	392	1.0	2.3
281	3	69.7	.064	-	-	-	2.66	99.3	92.4	95.9	12.4	122	82	102	115	139	167	202	230	310	366	404	.8	1.2
282	3	66.8	.022	-	-	-	2.26	99.1	92.0	95.6	11.1	126	86	99	111	136	165	204	235	311	346	398	1.1	1.4
283	4	69.7	.047	0	-	-	2.55	99.0	92.7	95.9	13.2	118	86	99	111	134	159	198	228	295	329	388	.7	1.6
284	2	66.7	-	-	-	-	2.37	99.2	92.1	95.7	-	-	-	-	-	-	-	-	-	-	-	-	-	
285	3	64.2	.026	-	-	-	2.27	97.0	90.8	93.9	11.1	129	86	102	117	144	171	214	251	315	348	404	.8	1.2
286	7	70.1	.055	-	-	-	2.91	99.0	93.2	96.1	12.7	119	85	94	107	133	159	201	232	322	357	395	.9	2.1
287	2	69.8	.061	-	-	-	2.75	99.1	92.7	95.9	12.0	122	84	98	112	137	155	200	227	309	345	406	1.0	1.5
288	2	68.6	.044	-	-	-	2.60	99.2	92.3	95.8	11.8	124	84	100	113	137	163	206	236	307	352	400	.9	2.1
AVERAGE	SAMPLES	68.0	.042	0	-	-	2.51	99.0	92.4	95.7	12.1	123	85	99	113	138	164	204	236	311	350	399	.9	1.7

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

ITEM	SAMPLES	GR. SULF.	SULF. ASTM D267	PHOS. ASTM D3231	LEAD, ASTM D526	OCTANE NUMBER D2699	RVP, 20°/L D439	DISTILLATION, F (CORRECTED TO 760 MM HG)						RES LOSS %									
								TEMPERATURE, F			PERCENT EVAPORATED												
								IBP	5	10	20	30	50	70	95	EP							
289	13	61.6	0.093	-	-	94.2	84.6	89.4	12.4	119	83	9.3	105	128	153	197	239	301	331	372	1.1	1.9	
290	3	63.9	0.034	-	-	92.9	85.2	89.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
291	3	65.1	0.023	-	-	92.7	85.8	89.3	9.3	134	90	99	114	135	160	208	255	325	352	396	1.0	1.0	
292	1	-	-	-	-	91.3	84.1	87.7	12.1	120	89	98	109	127	148	195	248	335	361	388	.8	1.7	
293	3	64.7	.025	-	-	92.3	84.5	88.4	8.9	137	90	108	121	142	162	202	237	306	336	378	.8	1.2	
294	1	65.5	-	-	-	93.4	86.8	90.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
295	14	66.5	0.031	-	-	92.7	85.9	89.3	12.6	115	79	88	98	115	134	186	233	305	340	379	.8	2.0	
296	3	65.2	-	-	-	93.2	85.5	89.3	11.1	121	82	95	106	122	141	185	230	315	357	388	1.2	1.3	
297	6	64.0	0.035	-	-	93.3	86.1	89.7	12.8	120	83	96	107	130	154	203	254	332	369	419	1.1	1.1	
298	11	64.5	0.032	-	-	91.7	85.8	88.8	12.7	115	80	87	97	116	138	192	247	314	341	373	1.0	2.2	
299	6	63.7	0.045	-	-	93.1	85.7	89.4	11.3	125	86	101	112	131	154	201	253	324	367	400	1.0	1.3	
300	11	65.0	0.043	-	-	92.9	85.6	89.4	10.8	123	81	93	105	123	143	191	243	320	354	391	.9	2.0	
301	6	63.4	.030	-	-	92.6	85.4	89.0	11.2	124	86	98	109	129	149	197	250	328	362	411	1.0	1.2	
AVERAGE SAMPLES		64.4	.039	-	-	1.42	92.8	85.5	89.2	11.4	123	84	96	108	127	149	196	244	319	354	390	1.0	1.6

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
- AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

ITEM	SAMPLES	GR. <sup>*</sup> ASTM D287	SULF' ASTM D1266	GUM, ASTM D381	PHOS. ASTM D3231	LEAD, ASTM D526	OCTANE NUMBER RES, ASTM D2699	RVP <sup>a</sup> / ASTM D439	DISTILLATION, ASTM D86													
									TEMPERATURE, F (CORRECTED TO 760 MM HG) PERCENT EVAPORATED			RES LOSS										
									IBP	5	10	20	30									
302	14	61.8	0.051	-	-	2.65	99.6	91.5	86	97	111	136	165	210	244	307	338	375	0.9	2.0		
303	3	67.0	.039	-	-	2.52	99.6	92.7	-	-	-	-	-	-	-	-	-	-	-	-		
304	3	67.7	.030	-	-	1.75	99.3	92.0	86	99	111	135	161	206	238	312	348	406	.8	1.2		
305	10	66.2	.037	-	-	1.95	99.0	91.6	85	98	109	132	157	204	236	321	355	401	.9	1.2		
306	3	66.2	.023	-	-	2.06	99.3	92.2	90	109	123	150	174	209	234	306	333	392	1.0	1.0		
307	1	65.1	-	-	-	2.24	98.9	92.8	95.9	-	-	-	-	-	-	-	-	-	-			
308	13	69.8	.029	-	-	1.55	98.6	92.4	95.5	83	91	101	119	137	185	225	296	339	394	.9	1.9	
309	3	68.1	-	-	-	2.10	99.5	92.5	96.0	84	96	110	129	150	199	223	305	343	400	.8	.7	
310	6	66.6	.027	-	-	2.06	99.3	91.9	95.6	84	97	110	134	159	212	243	312	353	405	1.0	1.1	
311	11	67.2	.007	-	-	2.05	97.9	93.3	95.6	82	91	104	130	159	207	238	313	348	400	.9	2.3	
312	8	66.9	.029	-	-	1.88	98.8	91.2	95.0	84	97	108	129	156	199	241	315	360	406	.7	1.3	
313	11	67.0	.029	-	-	2.16	99.3	92.4	95.9	83	91	104	129	155	203	238	314	347	402	9	2.1	
314	6	65.5	.043	-	-	2.51	99.3	91.9	95.6	125	85	98	111	134	160	205	241	325	366	407	.9	1.1
AVERAGE SAMPLES		66.5	.031	-	-	2.11	99.1	92.2	95.7	11.6	85	97	109	132	158	204	237	311	348	399	.9	1.4

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED  
 DIST. 11 SOUTH PLAINS  
 SOUTHERN KANS., SW MO., WESTERN ARK., OKLA., AND NORTHERN TEX.

## REGULAR-PRICE GASOLINE

ITEM	SAM- PLES	GR. <sup>a</sup> ASTM D287	SULF, ASTM D1266	GUM, ASTM D381	PHOS. ASTM D3231	LEAD, ASTM D526	OCTANE NUMBER RES, MOT, ASTM D2699	R+M ASTM D2700	20V/L ASTM D439 LB	DISTILLATION, ASTM D86 TEMPERATURE, F (CORRECTED TO 760 MM HG)						RES LOSS %							
										PERCENT EVAPORATED													
										IBP	5	10	20	30	50	95							
315	4	63.7	-	-	-	2.41	92.9	86.1	89.5	11.3	122	86	97	107	124	144	188	245	326	378	431	0.9	1.1
316	3	64.1	0.016	-	-	1.02	91.2	85.2	88.2	13.4	113	78	86	98	118	139	191	245	302	330	384	1.0	2.0
317	8	63.1	.047	1	0.000	1.669	92.5	86.1	89.3	12.2	120	81	96	106	126	148	198	250	327	362	414	1.0	1.8
318	5	62.6	.030	-	-	2.51	93.6	86.8	90.2	10.2	124	90	104	112	128	139	174	230	326	355	392	1.0	1.0
319	3	60.4	-	-	-	2.38	92.9	86.0	89.5	10.2	133	88	106	120	145	168	214	264	345	375	410	1.1	.9
320	3	63.7	-	-	-	2.51	93.5	86.5	90.0	10.2	128	88	103	114	134	154	193	244	338	374	418	1.3	1.2
321	4	-	-	-	-	-	92.6	87.8	90.2	12.6	121	89	98	113	154	203	247	322	358	398	436	9.2	6
322	6	62.8	.027	-	-	1.58	92.3	85.1	88.7	9.3	135	91	107	120	143	165	205	243	301	332	372	7	1.3
323	2	62.6	-	-	-	1.39	93.1	85.1	89.3	12.7	115	82	94	102	118	140	184	256	325	359	416	1.0	1.0
324	6	64.2	.028	0	-	1.98	92.5	85.9	89.9	13.0	114	78	92	100	116	135	183	241	333	386	412	.8	2.3
325	3	66.6	-	-	-	1.33	92.9	86.8	89.9	12.3	116	81	94	104	119	140	179	244	312	369	388	.8	1.2
326	6	62.7	.025	-	-	1.37	92.9	85.7	89.3	12.2	119	84	93	103	121	146	195	257	336	371	420	.9	1.4
327	16	62.9	.039	-	-	1.92	93.6	86.3	90.0	11.8	124	87	99	113	135	158	206	259	337	369	405	1.0	1.7
328	3	67.5	-	-	-	1.97	93.2	88.2	90.7	11.7	120	84	98	106	126	144	188	244	309	346	418	1.0	1.0
329	3	63.4	-	-	-	2.24	93.9	87.1	90.5	11.0	122	86	97	108	126	143	184	264	329	355	394	.7	1.3
330	6	63.3	.039	-	-	1.61	93.2	85.9	89.6	12.0	119	83	94	104	126	145	189	254	329	373	417	1.0	1.3
331	10	64.6	.023	0	-	1.28	92.7	86.0	89.4	13.1	114	81	92	101	118	139	188	244	310	339	370	.8	1.8
332	7	62.0	.029	-	-	1.31	92.7	86.0	89.4	12.4	117	83	90	103	120	140	193	255	335	366	412	1.2	2.2
333	11	63.2	.039	-	-	2.70	94.1	86.7	90.4	12.0	121	87	97	109	125	149	203	246	313	341	377	1.1	.8
334	2	60.5	.046	-	-	2.02	93.2	85.0	89.1	-	-	-	-	-	-	-	-	-	-	-	-	-	
335	4	62.9	.026	-	-	2.03	92.8	86.2	89.5	11.7	120	82	96	107	123	142	188	247	330	357	410	.6	.9
AVERAGE	SAMPLES	63.3	.032	0	.000	1.886	93.0	86.2	89.6	11.6	121	84	97	108	126	147	192	249	324	360	403	.9	1.5

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 DIST. 11 SOUTHERN PLAINS--CONTINUED  
 DIST. 11 SOUTHERN KANS., SW MO., WESTERN ARK., OKLA., AND NORTHERN TEX.

## PREMIUM-PRICE GASOLINE

ITEM	SAM- PLES	GR. ASTM D287	SULF. ASTM D1266	GUM, ASTM D3231	PHOS. ASTM D381	LEAD, ASTM D526	OCTANE NUMBER RES, ASTM D2699	R+M ASTM D2700	RVP, ASTM D323 LB	20V/L ASTM D439 F	DISTILLATION, ASTM D86						RES LOSS %						
											TEMPERATURE, °F CORRECTED TO 760 MM HG)												
											IBP	5	10	20	30	50							
336	5	64.4	0.020	-	-	-	98.9	92.5	95.7	10.6	130	80	99	110	138	170	223	267	335	379	434	1.1	1.4
337	3	65.3	0.024	-	-	-	98.0	92.6	95.3	12.2	122	78	92	107	132	174	211	244	305	344	392	1.0	2.0
338	8	64.9	0.036	1	0.000	2.31	99.3	92.3	95.8	12.1	125	83	100	115	141	171	212	246	328	366	413	1.1	2.0
339	5	62.0	0.044	-	-	-	99.3	91.8	95.6	10.3	128	82	100	110	129	150	202	258	325	371	410	.7	.8
340	3	65.6	-	-	-	-	99.3	91.9	95.6	9.9	135	88	105	121	153	178	211	239	322	367	414	1.0	1.0
341	3	60.8	-	-	-	-	98.5	91.4	95.0	11.4	126	80	91	106	132	165	225	267	324	359	414	1.1	1.4
342	10	63.2	0.036	-	-	-	98.5	91.6	95.1	12.6	130	83	92	105	127	149	208	242	313	348	387	1.2	2.0
343	16	67.6	0.021	-	-	-	99.3	92.1	95.7	10.3	132	85	101	117	144	172	207	231	299	341	374	1.0	1.6
344	2	62.8	-	-	-	-	99.1	91.6	95.4	12.7	126	82	101	117	151	183	226	268	354	387	418	1.0	1.0
345	6	66.1	0.032	0	-	-	99.1	92.7	95.9	13.5	120	77	95	108	137	172	218	258	364	396	425	1.0	2.1
346	3	67.2	-	-	-	-	99.2	92.6	95.9	12.8	117	81	92	103	123	144	198	239	289	329	350	1.0	1.5
347	6	62.3	0.027	-	-	-	99.4	91.4	95.4	11.0	128	86	99	110	135	165	214	265	330	358	400	.9	1.1
348	16	66.6	0.022	-	-	-	99.0	91.8	95.4	11.5	126	87	99	113	136	165	211	254	325	366	407	1.0	1.8
349	2	63.4	-	-	-	-	98.4	92.4	95.4	12.1	120	85	94	104	124	150	204	246	331	378	416	1.1	1.4
350	3	61.5	-	-	-	-	99.9	92.2	96.1	10.2	130	87	104	114	134	155	205	245	303	334	380	.8	1.2
351	6	65.8	0.030	-	-	-	99.4	93.4	96.4	12.6	120	82	95	107	131	157	207	248	338	360	416	1.0	1.3
352	9	64.2	0.018	0	-	-	98.6	92.8	95.7	13.1	120	82	100	108	131	160	209	253	310	349	388	.9	1.6
353	7	62.9	0.020	-	-	-	99.4	93.0	96.2	11.5	131	87	102	120	150	181	228	269	352	396	430	1.0	2.0
354	12	62.3	0.008	-	-	-	99.5	92.4	96.0	11.9	125	86	98	111	137	166	211	241	291	322	367	1.1	2.1
355	2	67.9	0.031	-	-	-	101.6	95.9	98.8	-	-	-	-	-	-	-	-	-	-	-	-	-	
356	4	65.4	-	-	-	-	99.3	92.8	96.1	11.0	125	84	98	108	127	150	201	245	329	371	410	1.2	1.4
AVERAGE SAMPLES	121	64.4	.026	0	.000	2.34	99.2	92.4	95.8	11.7	125	83	98	111	136	164	212	251	323	362	402	1.0	1.5

## DIST. 12 SOUTH TEXAS

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

## REGULAR-PRICE GASOLINE

ITEM	SAMPLES	GR. <sup>a</sup> ASTM D287	SULF' ASTM D1266	GUM, ASTM D381	PHOS. ASTM D3231	LEAD, ASTM D526	RES, ASTM D2699	OCTANE NUMBER R+M ASTM D2700	RVP, ASTM D323 2	20V/L ASTM D439 LB	DISTILLATION, ASTM D86						RES LOSS									
											TEMPERATURE, F (CORRECTED TO 760 MM HG)															
											IBP	5	10	20	30	50	70	90	95	EP	X	X	X	X		
357	8	64.1	0.028	1	0.001	2.47	94.3	87.7	91.0	10.9	122	90	104	114	127	140	176	229	317	344	390	1.0	1.3			
358	3	60.9	-	-	-	1.52	93.4	86.1	89.8	12.7	121	86	99	112	130	152	205	267	334	383	416	1.0	1.0			
359	8	59.8	-	-	-	1.27	94.6	87.4	91.0	10.3	132	88	103	118	141	165	211	261	332	359	406	1.0	1.3			
360	3	61.1	-	-	-	1.77	93.6	86.1	89.9	10.5	130	90	105	117	140	159	205	258	327	361	404	.8	1.2			
361	3	62.7	-	-	-	2.15	93.5	85.9	89.7	12.6	123	88	96	107	131	160	224	282	334	362	412	1.1	1.9			
362	3	61.1	-	-	-	3.68	91.4	85.4	88.4	9.2	138	90	112	127	149	168	207	247	302	327	394	1.2	1.3			
363	11	65.8	.024	2	.000	1.40	93.3	87.1	90.2	11.6	119	85	99	119	140	179	231	289	319	362	400	1.0	1.4			
364	11	62.3	.038	0	.000	1.61	93.2	86.5	89.9	11.7	122	84	96	107	125	147	203	262	337	373	424	1.1	1.6			
365	7	65.3	-	-	-	1.06	94.0	87.1	90.6	12.0	119	82	94	106	124	144	191	249	321	351	390	1.0	1.5			
366	6	64.9	.027	-	-	1.94	93.0	87.7	90.4	11.9	119	87	96	106	125	145	191	240	316	352	412	1.1	1.9			
367	4	63.2	.017	1	.000	2.22	93.6	87.4	90.5	11.5	122	82	93	103	122	145	203	277	336	365	396	1.1	1.7			
368	3	63.1	-	-	-	2.07	93.9	86.0	90.0	12.7	121	84	92	104	125	153	219	277	326	351	382	1.0	2.0			
369	11	63.0	.046	1	.000	1.63	93.0	86.7	89.9	11.8	119	84	97	106	123	141	189	255	325	352	394	1.0	1.5			
370	11	64.0	.025	1	.000	2.58	94.0	87.1	90.6	11.6	124	86	101	113	133	156	203	249	311	340	380	1.0	1.3			
AVERAGE	SAMPLES	63.0	.029	1	.000	1.96	93.5	86.7	90.1	11.5	124	86	99	111	130	151	200	256	322	353	397	1.0	1.5			

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 DIST. 12 SOUTH TEXAS--CONTINUED  
 AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

ITEM	SAM- PLES	GR. ASTM D287	SULF, ASTM D1266	GUM, ASTM D381	PHOS. ASTM D3231	LEAD, ASTM D526	RES, ASTM D2699	OCTANE NUMBER R+M ASTM D2700	PREMIUM-PRICE GASOLINE			DISTILLATION, ASTM D86 (CORRECTED TO 760 MM HG)										
									RVP, 20V/L			TEMPERATURE, F			PERCENT EVAPORATED					RES LOSS		
									IBP	5	10	20	30	40	50	70	90	95	EP	X	X	
371	8	60.6	0.023	1	0.000	3.00	99.3	92.5	95.9	10.9	12.6	87	101	111	128	147	203	266	337	357	401	
372	3	62.5	"	-	2.64	99.1	92.2	95.7	12.0	12.0	80	92	105	124	148	201	244	334	369	416	1.0 1.5	
373	8	61.5	.017	-	-	2.45	98.5	91.3	94.9	10.1	13.3	87	104	118	143	169	216	263	334	366	406	1.0 1.7
374	3	62.1	"	-	-	2.51	99.1	92.1	95.6	10.2	13.4	90	103	120	148	176	216	254	333	383	407	1.0 2.0
375	3	65.0	-	-	-	3.05	99.5	91.7	95.6	12.7	11.6	86	97	107	127	148	196	231	310	346	386	1.0 2.0
376	3	62.5	"	-	-	3.53	98.6	89.1	93.9	8.9	13.5	95	112	123	138	152	192	245	315	342	366	1.0 1.0
377	11	66.3	.014	0	0.000	1.60	99.4	93.1	96.3	11.6	12.1	86	98	110	126	145	188	228	278	306	350	1.0 1.7
378	11	63.5	.017	0	0.000	2.34	99.3	91.7	95.5	11.9	12.2	85	98	110	131	154	202	243	300	332	383	1.0 1.4
379	7	67.1	"	-	-	1.83	99.3	92.9	96.1	11.5	12.2	85	98	108	123	140	199	245	303	334	391	1.0 1.1
380	5	63.8	.019	-	-	2.74	99.0	92.5	95.8	11.8	12.2	83	92	104	127	152	204	249	326	378	411	9 2.2
381	4	59.3	.005	0	0.000	2.13	99.7	92.3	96.0	11.5	12.4	88	94	108	129	155	209	249	320	352	383	1.0 2.6
382	3	66.6	"	-	-	3.08	99.6	91.6	95.6	12.9	11.5	82	92	102	122	145	191	233	308	346	376	9 2.1
383	11	62.5	.017	1	-	2.52	99.2	93.0	96.1	12.1	12.1	84	96	107	125	147	209	267	314	340	391	1.0 1.5
384	11	60.6	.017	0	0.000	2.95	99.6	92.0	95.8	11.3	12.8	85	98	113	140	169	219	260	313	344	381	1.0 1.7
AVERAGE SAMPLES	63.2	.016	0	0.000	2.60	99.2	92.0	95.6	11.4	12.4	86	98	110	131	153	203	248	316	350	389	1.0 1.7	

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED  
 DIST. 13 SOUTH MT. STATES  
 SW KANS., OKLA. AND TEX. PANHANDLES, W. TEX., N. MEX., COLO., UTAH, ARIZ., NEV., AND E. CALIF.

## REGULAR-PRICE GASOLINE

ITEM	SAM- PLES	GR. ASTM D287	SULF, ASTM D1266	GUM, ASTM D381	LEAD, ASTM D526	RES, ASTM D231	R+M ASTM D2699	20V/L	DISTILLATION, ASTM D86						RES LOSS %								
								TEMPERATURE, F (CORRECTED TO 760 MM HG)			PERCENT EVAPORATED												
								LB	F	IBP	5	10	20	30	50								
385	6	62.9	0.024	-	-	1.05	92.2	84.0	88.1	10.2	128	88	101	112	133	153	198	255	330	360	395	1.0	1.5
386	8	62.6	.020	-	-	1.056	91.7	84.2	88.0	12.5	122	87	99	113	136	161	209	258	329	352	393	.9	2.6
387	18	60.8	.037	0	0.000	1.068	92.4	84.8	88.6	11.2	125	84	96	110	132	155	202	258	341	372	416	1.0	2.8
388	3	63.8	.060	-	-	1.32	90.7	83.5	87.1	11.5	122	86	100	107	124	143	196	264	364	415	511	1.2	1.8
389	6	-	-	-	-	-	92.4	85.2	88.8	12.1	124	89	101	117	139	160	205	259	359	380	413	1.0	2.3
390	24	62.5	.043	1	0.000	1.063	91.9	85.6	88.8	11.4	124	88	99	111	130	152	199	252	338	381	410	.9	1.7
391	14	61.1	.064	1	0.000	1.061	92.9	85.3	89.1	10.7	128	87	100	114	130	158	206	264	330	375	411	1.0	1.7
392	3	61.9	.053	-	-	1.50	90.8	84.2	87.4	10.5	11.2	84	101	111	130	151	202	260	338	380	450	1.0	2.0
393	23	66.8	.086	-	-	1.26	92.0	84.9	88.5	11.6	120	86	100	111	126	143	183	235	326	369	401	1.0	1.6
394	13	66.7	.018	-	-	1.68	91.6	86.5	89.1	11.8	121	86	99	109	128	148	193	242	336	381	408	1.0	1.6
395	16	60.1	.093	0	0.000	1.51	92.3	85.1	88.7	11.4	126	87	99	112	136	160	210	266	348	378	408	1.0	1.7
396	3	62.9	.026	-	-	1.29	91.2	85.0	88.0	10.6	127	83	98	110	131	155	205	257	337	382	430	.9	2.6
397	22	63.2	.067	2	0.000	1.60	92.2	85.8	89.0	11.4	124	85	99	111	132	155	203	254	333	375	412	1.1	2.1
398	27	62.2	.035	1	0.000	1.22	92.5	84.7	88.6	11.7	124	87	98	113	134	156	202	255	334	367	403	1.0	2.4
399	42	62.2	.050	5	0.000	1.81	92.9	85.4	89.2	10.6	130	89	102	116	138	162	209	260	328	361	393	1.2	1.8
400	15	61.4	.032	0	0.000	1.39	92.5	85.0	88.8	11.4	126	86	96	111	133	158	212	269	335	364	409	1.0	2.9
401	1	62.6	.032	0	0.014	3.65	89.2	85.6	87.4	8.1	142	98	121	137	153	166	193	228	294	314	370	.8	1.2
402	3	62.4	.020	-	-	1.16	90.0	84.1	87.1	10.7	128	86	103	114	134	155	205	260	337	368	410	1.0	2.0
AVERAGE	SAMPLES	62.7	.045	1	0.002	1.58	91.7	84.9	88.3	11.1	126	87	101	113	134	155	202	255	335	371	414	1.0	2.0

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
DIST. 13 SOUTH MT. STATES--CONTINUED  
SW KANS., OKLA. AND TEX. PANHANDLES, W. TEX., N. MEX., COLOR., UTAH, ARIZ., NEV., AND E. CALIF.

## PREMIUM-PRICE GASOLINE

ITEM	SAM- PLES	GR. ASTM D287	SULF. ASTM D1266	GUM, ASTM D361	PHOS. ASTM D526	LEAD, ASTM D3231	RES/ ASTM G/GAL	OCTANE NUMBER	DISTILLATION, ASTM D86			RVP, 20°/L IBP	TEMPERATURE, F (CORRECTED TO 760 MM HG) D323 F	PERCENT EVAPORATED	RES LOSS								
									R+M	ASTM D439	ASTM D439												
									LB	2	2												
403	6	65.1	0.013	-	-	2.09	97.7	87.3	93.5	11.0	126	84	98	110	133	154	207	253	330	364	413	1.1	1.4
404	8	61.4	.027	-	-	2.43	97.2	89.0	93.1	12.1	127	85	99	115	141	169	225	278	352	366	403	1.2	2.7
405	18	62.4	.035	1	0.000	2.46	98.6	91.6	95.1	11.1	128	86	101	112	136	161	214	262	330	365	406	1.1	2.7
406	3	66.6	.018	-	-	1.75	95.9	89.5	92.7	12.0	120	81	93	103	122	145	201	241	321	360	412	1.0	2.0
407	18	63.9	.040	-	-	2.16	97.0	90.4	93.7	11.7	127	87	100	117	144	171	217	259	342	374	412	1.0	2.2
408	24	64.2	.032	1	.000	2.50	98.0	91.5	94.8	11.6	124	86	98	111	132	156	206	246	323	362	399	1.0	1.8
409	12	63.8	.040	1	.000	1.98	98.6	91.6	95.1	10.8	131	89	102	116	142	171	222	266	340	385	425	1.0	2.5
410	3	62.5	.020	-	-	2.64	96.5	87.6	92.1	9.7	139	89	109	124	151	178	230	279	342	375	410	0.9	1.6
411	24	69.1	.031	-	.000	1.24	97.9	91.3	94.6	11.5	122	87	97	108	124	142	195	238	321	367	404	1.0	1.6
412	11	66.7	-	-	-	2.41	97.6	92.4	95.0	12.3	122	83	93	108	132	160	212	251	348	381	414	1.1	2.0
413	16	63.0	.027	0	.000	2.15	98.9	91.6	95.3	11.2	128	86	100	116	142	168	214	250	318	342	390	1.0	1.8
414	3	65.7	.018	-	-	1.37	95.3	89.4	92.4	11.2	126	85	100	112	132	157	208	250	338	380	424	1.0	2.0
415	21	64.3	.040	1	.001	2.28	97.9	91.3	94.6	11.7	125	86	99	112	135	162	212	254	337	373	407	1.1	2.4
416	27	65.2	.030	3	.000	1.93	97.9	91.2	94.6	11.2	127	87	99	115	139	163	208	252	323	354	395	1.1	2.5
417	42	62.5	.019	1	.000	2.63	98.6	91.6	95.1	10.5	132	88	102	118	143	169	217	259	326	360	394	1.0	1.8
418	15	61.2	.029	2	.000	1.87	97.7	90.6	94.2	11.4	126	83	95	112	136	163	212	257	326	371	418	1.1	2.6
419	1	60.9	.005	0	.013	3.90	97.0	91.4	94.2	9.5	133	93	115	122	138	156	196	243	305	321	382	1.0	1.0
420	4	65.3	.036	-	-	1.69	96.1	89.9	93.0	12.1	123	82	98	109	132	158	209	250	335	387	428	0.9	2.1
AVERAGE SAMPLES	256	64.1	.027	1	.001	2.19	97.5	90.6	94.1	11.3	127	86	100	113	136	161	211	255	331	366	408	1.0	2.0

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED  
 DIST. 14 NORTH MT. STATES  
 WYO., MONT., IDAHO, EASTERN WASH., AND EASTERN OREG.

## REGULAR-PRICE GASOLINE

ITEM	SAM- PLES	GR. ASTM D287	SULF. ASTM D1266	GUM, ASTM D381	PHOS. ASTM D526	LEAD, ASTM D3231	OCTANE NUMBER	RVP, 20V/L			DISTILLATION, ASTM D86			RES LOSS %									
								RES, ASTM D2699	MOT, ASTM D2700	R+M --- LB	TEMPERATURE, F (CORRECTED TO 760 MM HG)												
											IBP	5	10	20	30								
421	11	63.6	0.034	2	0.001	1.42	94.3	84.9	89.6	12.6	117	77	91	102	123	145	194	246	324	362	390	1.9	3.0
422	7	64.1	.036	1	.001	1.73	92.5	85.8	89.2	12.1	118	82	94	104	121	142	190	242	320	358	408	1.6	3.1
423	13	64.4	.041	0	.001	1.81	92.9	86.5	89.7	12.4	119	81	92	106	126	149	197	246	328	363	401	1.3	2.5
424	9	63.3	.068	1	.000	1.29	93.9	84.4	89.2	13.3	115	85	96	106	123	143	187	245	329	359	390	1.1	2.7
425	6	63.3	.041	-	-	1.46	92.7	85.5	89.1	11.2	126	87	101	112	134	158	203	248	326	358	396	1.0	2.3
426	11	63.2	.102	1	-	1.93	92.3	85.6	89.0	11.9	123	82	93	110	132	156	205	255	339	376	409	1.4	2.5
427	20	63.2	.038	1	.002	1.76	92.3	85.2	88.6	12.3	120	83	95	107	128	151	200	253	333	370	408	1.4	2.7
428	9	62.9	.034	1	.001	1.44	94.5	85.0	89.9	12.2	118	79	91	101	122	144	193	251	328	357	396	1.9	3.1
429	9	62.9	.025	1	.001	1.66	91.5	85.7	88.6	11.7	122	82	96	107	128	150	198	249	321	352	401	1.8	2.6
430	11	65.3	.021	2	.001	1.45	93.2	86.2	89.7	12.3	119	83	94	106	126	147	193	240	305	334	368	1.7	2.7
431	14	63.7	.041	0	.001	1.46	93.7	84.7	89.2	12.8	117	84	93	106	126	148	194	247	325	352	388	1.0	3.0
432	10	64.1	.039	0	.001	1.64	92.6	85.8	89.2	11.9	120	84	96	107	126	147	193	245	321	358	407	1.6	2.7
433	1	62.3	.020	0	-	1.34	92.5	86.3	89.4	13.2	119	78	92	104	131	161	218	273	343	372	412	4.0	3.0
434	3	63.8	.041	-	-	1.69	93.8	86.3	90.1	13.4	115	84	96	105	125	147	190	238	314	350	404	1.0	3.0
AVERAGE	SAMPLES	63.6	.042	1	.001	1.59	93.1	85.6	89.4	12.4	119	82	94	106	127	149	197	248	325	359	398	1.6	2.8

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 DIST. 15 PACIFIC NORTHWEST--CONTINUED  
 AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED  
 WESTERN WASH. AND WESTERN OREG.

## PREMIUM-PRICE GASOLINE

ITEM	SAMPLES	GR. <sup>a</sup> , ASTM D287	SULF, ASTM D1266	GUM, ASTM D381	LEAD, ASTM D526	OCTANE NUMBER	DISTILLATION, ASTM D86			DISTILLATION, F (CORRECTED TO 760 MM HG)			RES LOSS										
							RVP, ASTM D439	20V/L	TEMPERATURE, F	PERCENT EVAPORATED	IBP	5	10	20	30	50	70	90	EP	X			
							LB	F	IBP														
457	8	58.1	0.006	1	0.001	2.56	98.5	91.6	95.1	11.4	128	84	97	113	137	162	222	283	331	359	398	1.2	2.6
458	4	66.4	.012	1	.001	2.07	99.8	91.1	95.5	12.6	120	88	100	111	132	156	199	233	281	311	361	.9	3.9
459	2	61.5	.010	0	.001	3.55	98.8	92.5	95.7	10.9	125	100	108	114	126	140	206	276	325	348	386	1.0	1.0
460	5	62.1	.014	0	.003	2.55	99.4	90.8	95.1	11.9	124	86	97	110	132	158	212	259	321	351	387	1.0	3.7
461	8	66.7	.009	1	.000	2.23	99.9	91.3	95.6	13.1	118	86	96	110	131	156	201	232	285	321	365	.9	2.9
462	9	65.0	.011	0	.001	2.30	98.5	92.3	95.4	12.3	123	82	95	108	132	158	206	254	310	338	375	1.0	2.7
463	8	64.5	.006	1	.000	2.24	99.3	91.5	95.4	12.3	121	80	95	108	131	156	205	247	306	338	380	1.1	2.0
464	8	62.3	.008	1	.000	2.69	99.7	91.1	95.4	12.4	121	83	94	107	129	153	206	260	323	351	393	1.1	2.6
465	8	64.8	.006	1	.000	1.76	99.0	90.8	94.9	12.6	120	83	94	108	132	159	205	241	296	326	371	1.0	2.6
AVERAGE	SAMPLES	63.5	.009	1	.001	2.44	99.2	91.4	95.3	12.2	122	86	97	110	131	155	207	254	309	336	380	1.0	2.7

## DIST. 16 NORTH CALIFORNIA

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

## REGULAR-PRICE GASOLINE

ITEM	SAM- PLES	GR. ASTM D287	SULF/ ASTM D1266	GUM/ ASTM D381	LEAD/ ASTM D3231	PHOS/ ASTM D526	OCTANE RES/ ASTM D2699	NUMBER R+M ASTM D2700	20V/L ASTM D439	DISTILLATION, ASTM D86												
										TEMPERATURE, F (CORRECTED TO 760 MM HG)												
										IBP	5	10	20	30	50	70	90	95	EP	%	RES LOSS	
466	8	61.8	0.049	3	0.002	1.46	94.2	84.5	89.4	11.2	124	92	98	111	130	152	198	254	334	372	411	1.0 3.1
467	3	59.3	-	-	-	1.26	91.7	86.1	88.9	10.8	131	84	98	115	143	169	220	266	323	345	397	.6 4.2
468	5	60.8	.052	4	.001	1.62	94.9	85.6	90.3	11.1	126	86	98	109	130	154	208	262	340	377	413	1.0 2.7
469	5	58.8	.016	0	.001	1.64	92.8	86.9	89.9	9.6	137	95	108	123	146	171	220	263	320	351	396	1.2 1.5
470	9	60.6	.050	1	.001	2.38	94.0	84.9	89.5	10.3	129	88	101	115	136	158	203	254	333	363	395	1.1 3.1
471	2	62.0	-	-	-	1.21	92.6	83.4	88.0	-	-	-	-	-	-	-	-	-	-	-	-	
472	9	60.1	.036	1	.002	1.57	94.4	85.6	90.0	11.8	125	86	93	107	130	158	219	277	348	387	415	1.1 3.3
473	9	62.6	.006	1	.003	2.48	93.2	87.0	90.1	10.8	125	89	99	116	140	162	206	253	316	346	395	1.1 2.9
474	9	63.1	.009	1	.001	.46	93.1	85.2	89.2	11.3	123	88	97	111	129	148	191	239	315	350	396	1.1 2.7
475	9	60.8	.049	1	.000	1.72	94.1	84.8	89.5	11.3	126	89	99	111	133	158	208	262	337	369	408	1.1 3.1
476	9	60.5	.006	1	.001	.52	92.1	85.6	88.9	10.7	127	89	98	114	136	156	199	245	299	333	377	1.0 2.9
AVERAGE	SAMPLES	60.9	.030	1	.001	1.49	93.4	85.4	89.4	10.9	126	89	99	113	135	159	207	258	327	359	400	1.1 3.0

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED  
 DIST. 16 NORTH CALIFORNIA--CONTINUED

## PREMIUM-PRICE GASOLINE

ITEM	SAM- PLES	GR. ASTM D267	SULF, ASTM D1266	GUM, ASTM D381	PHOS., ASTM D526	LEAD, ASTM D3231	OCTANE NUMBER	DISTILLATION, ASTM D86			DISTILLATION, F (CORRECTED TO 760 MM HG)												
								RES, ASTM D2699	MOT, ASTM D2700	R+M --- LB	TEMPERATURE, F PERCENT EVAPORATED												
											ASTM D323 D439 F	IBP 5	10 10	20 30	50 50	95 95	EP EP	X X					
477	9	58.9	0.017	1	0.001	2.32	99.8	91.7	95.8	11.3	129	88	97	114	142	170	221	264	331	362	407	1.0	3.6
478	3	56.5	-	-	-	2.38	99.0	91.1	95.1	11.6	126	85	101	113	138	162	212	260	312	337	391	*.9	2.6
479	5	58.7	.016	6	.001	2.18	99.7	91.5	95.6	11.6	127	85	95	109	137	171	224	269	331	363	403	1.0	3.2
480	5	56.3	.013	2	.000	1.94	99.3	91.4	95.4	10.8	130	85	99	115	142	170	221	264	322	358	398	*.1	2.5
481	9	60.4	.016	0	.001	2.47	99.5	91.5	95.5	10.9	131	88	101	115	142	169	219	261	332	364	396	1.0	3.0
482	3	59.7	-	-	-	2.57	99.4	91.2	95.3	11.3	126	87	94	106	137	167	215	259	327	360	400	1.0	4.0
483	9	58.7	.018	1	.001	2.27	99.8	91.0	95.4	11.2	128	85	95	113	140	166	213	254	320	352	399	1.0	3.4
484	9	60.0	.009	1	.004	2.91	99.3	91.3	95.3	10.9	129	88	102	115	139	163	209	253	325	356	402	1.1	2.5
485	9	59.7	.008	1	.004	3.03	98.9	91.3	95.1	11.2	126	87	98	113	136	159	203	250	318	349	400	1.0	3.1
486	9	58.4	.016	1	.001	2.93	99.7	91.9	95.8	11.2	129	86	102	113	141	171	221	265	334	358	405	1.1	3.7
487	8	61.8	.007	1	.001	2.75	97.5	91.6	94.6	12.2	120	87	93	108	128	149	194	246	317	340	394	1.0	3.6
AVERAGE	SAMPLES	59.0	.013	2	.002	2.52	99.3	91.4	95.4	11.3	127	86	98	112	138	165	214	259	324	354	400	1.0	3.2

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED

TABLE 3. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
 AVERAGE DATA FOR DIFFERENT BRANDS--CONTINUED  
 DIST. 17 SOUTH CALIFORNIA--CONTINUED

PREMIUM-PRICE GASOLINE

ITEM	SAMPLES	GR., ASTM D287	SULF., ASTM D1266	GUM, ASTM D381	PHOS., ASTM D3231	LEAD, ASTM D526	OCTANE NUMBER RES, ASTM D2699	MOT, ASTM D2700	R+M --- D439	20V/L LB	RVP, ASTM D323	TEMPERATURE, F (CORRECTED TO 76.0 MM HG) IBP	DISTILLATION, ASTM D86						RES LOSS %	
													PERCENT EVAPORATED							
													5	10	20	30	50	70	95	
499	10	59.7	0.041	2	0.001	2.68	98.9	91.2	95.1	12.4	122	84	95	108	130	156	214	266	325	3.1
500	3	52.1	-	-	-	1.86	98.6	89.5	94.1	10.8	142	86	113	136	176	209	250	285	328	2.8
501	5	61.7	.033	1	.000	2.09	98.8	91.7	95.3	11.5	125	84	97	110	135	161	212	255	323	2.6
502	9	60.6	.023	0	.000	2.30	98.6	91.5	95.1	11.9	125	83	90	109	139	169	218	262	328	4.0
503	7	61.6	.034	2	.001	2.45	99.1	91.4	95.3	11.4	126	87	97	111	136	160	210	247	312	2.7
504	3	56.6	-	-	-	2.95	99.0	90.5	94.8	11.9	127	84	101	117	147	176	219	264	339	3.9
505	12	59.8	.036	3	.000	2.53	99.8	91.3	95.6	10.9	130	89	99	117	143	173	217	257	314	3.54
506	11	57.0	.080	2	.000	2.22	99.7	90.2	95.0	11.0	131	86	102	117	145	172	220	268	338	2.2
507	12	63.9	.060	3	.000	2.54	98.9	90.4	94.7	11.6	121	86	94	108	125	144	191	241	295	2.4
508	12	60.7	.032	1	.000	3.01	99.2	91.4	95.3	10.6	130	86	102	116	139	164	214	268	324	3.9
509	10	58.3	.015	1	.000	1.69	97.9	90.8	94.4	11.7	126	84	95	110	137	166	218	255	321	3.2
AVERAGE SAMPLES	59.3	.039	2	.000	2.39	99.0	90.9	95.0	11.4	128	86	99	114	141	168	217	261	322	358	4.03

TABLE 4. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR BRANDS IN EACH DISTRICT

TABLE 4. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
AVERAGE DATA FOR BRANDS IN EACH DISTRICT--CONTINUED

DISTRICT NO. AND NAME		NO. OF BRANDS		GR., SULF.		GUM, ASTM D287		PHOS., ASTM D1266		LEAD, ASTM D3231		OCTANE NUMBER		RVP/ 20V/L		DISTILLATION, ASTM D86 (CORRECTED TO 760 MM HG)		RES LOSS										
		SAM- PLES	BRANDS	ASTM D381	ASTM D1266	API	WT %	ASTM D2699	ASTM D526	ASTM D2700	R+N G/GAL	ASTM D2699	ASTM D439	ASTM D323	ASTM D439	PERCENT EVAPORATED	IBP F	5 LB	10 F	20 IBP	30 F	50 IBP	70 F	95 IBP	EP	%	X	%
1	NORTHEAST	12	57	61.2	0.030	1	-	2.11	99.6	91.6	95.6	12.7	11.9	83	92	104	127	152	208	257	316	347	393	0.9	2.1			
1	MID-ATLANTIC COAST	2	216	61.8	.021	1	0.002	2.16	99.3	91.6	95.6	12.7	12.0	83	92	104	127	152	208	257	316	347	393	0.9	2.1			
1	SOUTHEAST	18	208	61.8	.017	1	0.002	2.20	99.4	91.8	95.6	11.4	12.6	84	97	110	133	158	213	261	324	355	398	1.0	2.9			
1	APPALACHIAN	17	159	61.0	.015	1	0.002	1.94	99.2	91.7	95.5	12.8	12.0	83	94	106	129	157	209	251	322	356	404	1.0	2.6			
1	MICHIGAN	15	121	60.6	.024	1	0.002	1.74	99.0	91.8	95.4	12.9	11.9	80	88	104	130	159	209	244	314	353	403	0.9	3.1			
1	NORTH ILLINOIS	12	50	64.3	.023	1	0.001	1.95	99.0	92.3	95.7	12.6	12.0	81	93	108	133	160	207	236	302	347	393	1.0	2.8			
2	CENTRAL MISSISSIPPI	22	114	64.2	.028	2	0.002	2.14	99.3	91.9	95.6	12.1	12.3	84	97	110	134	161	208	248	317	359	401	1.0	2.8			
2	LOWER MISSISSIPPI	19	146	62.8	.042	0	-	2.13	99.5	91.8	95.7	12.2	12.2	82	95	110	130	158	211	251	322	357	402	0.9	1.6			
2	NORTH PLAINS	15	52	68.0	.042	0	-	2.51	99.0	92.4	95.7	12.1	12.3	85	99	113	138	164	204	236	311	350	399	0.9	1.7			
2	CENTRAL PLAINS	13	92	66.5	.031	=	-	2.11	99.1	92.0	95.7	11.6	12.4	85	97	109	132	158	204	237	311	348	399	0.9	1.4			
2	SOUTH PLAINS	21	121	64.4	.026	0	0.000	2.34	99.2	92.4	95.6	11.7	12.5	83	98	111	136	162	212	251	323	362	402	1.0	1.5			
2	SOUTH TEXAS	14	91	63.2	.016	0	0.000	2.60	99.2	92.0	95.6	11.4	12.4	86	98	110	131	153	203	248	316	356	389	1.0	1.7			
2	SOUTH MOUNTAIN STATES	18	256	64.1	.027	0	0.001	2.19	97.5	90.6	94.1	11.3	12.7	86	100	113	136	161	211	255	331	366	408	1.0	2.0			
2	NORTH MOUNTAIN STATES	13	136	67.2	.037	1	0.002	2.03	98.9	91.3	95.1	11.9	12.3	82	96	110	134	160	206	238	316	358	400	1.0	2.9			
2	PACIFIC NORTHWEST	9	60	63.5	.009	1	0.001	2.44	99.2	91.4	95.3	12.2	12.2	86	97	110	131	155	207	254	309	378	400	1.0	2.7			
2	NORTH CALIFORNIA	11	78	59.0	.013	2	0.002	2.52	99.3	91.4	95.3	11.3	12.7	86	98	112	138	165	214	259	324	354	400	1.0	3.2			
2	SOUTH CALIFORNIA	11	94	59.3	.039	2	0.000	2.39	99.0	90.9	95.0	11.4	12.8	86	99	114	141	168	217	261	322	358	403	1.1	2.8			
SAMPLES 2/051		AVERAGE	93.5	.025	1	0.001	2.21	99.1	91.7	95.4	12.0	12.3	84	96	109	133	159	209	250	318	354	399	1.0	2.2				

TABLE 5. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
DATA FOR SOME ADDITIONAL GRADES

THIRD-GRADE GASOLINE

DISTRICT AND ITEM NUMBERS	SAMPLES	GR.° ASTM D287	SULF. ASTM D1266	GUM, ASTM D361	LEAD, ASTM D3231	PHOS., ASTM D526	OCTANE NUMBER	RVP, ASTM D323 --- LB	20V/L ASTM D439	DISTILLATION, ASTM D86						RES LOSS %							
										TEMPERATURE, F (CORRECTED TO 760 MM HG)													
										IBP	5	10	20	30	50	70	95	EP					
1 510	1	59.3	-	-	0.57	95.2	85.7	90.5	7.5	147	100	-	130	150	-	208	-	300	-	382	1.0	2.0	
1 511	4	61.9	0.010	1	-	0.38	94.3	88.1	91.2	12.7	83	88	101	121	145	218	271	315	343	402	1.0	1.8	
1 512	1	62.2	-	-	0.48	96.4	87.5	92.0	12.3	119	80	-	104	122	-	198	-	312	-	382	1.0	2.0	
1 513	2	58.5	-	-	-	0.33	91.6	83.3	87.5	12.6	122	80	-	97	127	-	235	-	360	-	419	1.0	3.0
1 514	1	66.7	-	-	0.42	95.4	87.6	91.5	15.0	106	75	-	90	107	-	187	-	335	-	387	1.0	4.0	
1 515	1	58.7	-	-	0.01	91.9	84.7	88.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1 516	3	61.4	-	-	0.03	94.6	83.1	88.4	12.6	121	63	95	107	130	154	210	265	334	373	395	0.8	2.2	
1 517	5	59.5	0.019	4	0.003	87	93.8	84.5	89.2	11.0	131	91	102	116	141	170	224	262	313	338	392	1.2	2.2
2 518	3	60.7	0.055	2	0.003	1.53	93.0	85.5	89.3	13.8	114	79	85	97	118	142	205	281	362	392	429	0.7	4.3
2 519	8	59.2	0.013	1	0.001	0.65	94.3	86.8	90.6	12.7	121	81	92	101	126	157	222	268	326	364	413	1.1	2.9
2 520	1	61.5	0.010	0	0.003	0.36	96.6	87.0	91.8	12.1	117	94	95	103	117	134	185	240	297	324	360	0.8	2.2
2 521	7	60.6	0.036	1	0.001	0.88	91.7	83.6	87.7	11.4	126	85	96	107	130	155	221	287	349	378	415	1.3	1.8
2 522	5	57.6	0.014	1	0.001	0.05	92.0	83.9	88.0	9.7	132	90	103	120	154	215	288	341	365	423	1.0	2.0	
2 523	10	58.9	0.039	4	0.002	0.09	95.3	84.3	89.6	11.3	125	88	98	109	130	154	212	287	346	361	406	1.1	2.3
3 524	10	58.6	0.018	-	0.03	0.94	83.7	89.3	11.5	12.2	84	97	107	128	149	196	269	336	360	400	1.0	1.4	
3 525	3	64.0	0.037	-	0.02	0.92	84.2	86.1	88.1	11.7	125	84	96	107	136	170	214	252	324	372	414	1.2	1.3
3 526	4	61.6	0.024	-	0.28	91.9	84.5	88.2	11.5	125	84	97	108	131	158	213	276	354	375	400	1.0	1.0	
3 527	1	61.3	-	-	0.49	96.4	88.0	92.2	10.6	127	90	-	116	132	-	200	-	308	-	376	1.0	3.0	
3 528	1	59.6	-	-	0.45	94.4	86.7	90.6	9.6	131	80	93	103	125	148	218	263	301	332	388	0.6	1.4	
3 529	10	59.0	0.024	-	0.05	92.3	82.6	87.6	8.7	141	93	111	125	149	169	214	258	333	365	427	1.0	1.6	
3 530	6	59.5	0.017	8	0.001	1.19	94.0	85.2	89.6	12.4	124	82	97	109	136	166	221	260	312	337	376	1.4	1.4
4 531	2	57.4	0.026	4	0.008	0.02	94.3	83.4	88.9	9.6	132	85	100	114	136	156	202	276	338	360	406	0.3	2.7
4 532	5	58.6	0.006	-	0.24	92.1	84.1	88.1	12.3	120	85	97	108	126	145	195	268	333	366	413	1.0	1.5	
4 533	1	61.1	0.011	2	0.02	91.8	82.9	87.4	12.1	123	85	102	112	131	152	208	263	325	356	408	1.0	1.7	

TABLE 5. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
DATA FOR SOME ADDITIONAL GRADES--CONTINUED

TABLE 5. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
DATA FOR SOME ADDITIONAL GRADES--CONTINUED

**THIRD-GRADE GASOLINE--CONTINUED**

DISTRICT AND ITEM NUMBERS	GR., ASTM D287 API	SULF., ASTM D1266 WT %	GUM, ASTM D381 MG	PHOS., ASTM D526 G/GAL	LEAD, ASTM D3231 G/GAL	OCTANE NUMBER RES. ASTM D2699	RVP, ASTM D439 LB	DISTILLATION, ASTM D86						RES LOSS %								
								TEMPERATURE, F (CORRECTED TO 760 MM HG)			PERCENT EVAPORATED											
								IBP	5	10	20	30	50									
7 558	2	60.9	.012	-	-	93.5	89.6	11.2	83	94	106	133	161	219	268	313	331	364	1.1	.9		
6 559	6	59.6	.026	-	-	93.4	83.1	10.4	127	86	94	111	132	148	198	266	333	365	406	1.0	2.0	
6 560	5	63.1	.037	-	-	93.8	86.4	90.3	12.8	117	84	91	101	124	154	199	253	344	378	418	9	2.1
6 561	6	61.3	.036	-	-	91.3	84.2	87.8	11.2	125	83	-	106	129	-	213	-	342	-	409	1.0	3.0
8 562	1	61.7	-	-	-	91.3	96.5	97.0	91.8	10.9	70	-	107	127	-	203	-	315	-	387	1.0	2.0
6 563	2	61.4	-	-	-	91.5	84.2	87.9	10.6	126	86	-	114	134	-	202	-	346	-	437	1.0	2.3
8 564	6	59.6	.018	-	-	93.9	85.4	89.7	12.2	128	69	100	116	146	182	229	263	314	332	388	.9	1.6
9 565	3	66.5	.013	-	-	91.7	82.9	87.3	12.5	120	84	102	112	134	158	198	230	286	312	388	.6	.9
9 566	3	64.1	.049	-	-	92.2	84.5	88.4	12.3	122	86	98	108	126	146	192	241	314	349	396	.5	1.0
10 567	3	69.6	.019	-	-	92.4	89.4	90.9	13.0	119	86	92	102	132	165	211	235	296	322	390	.9	2.1
10 568	8	64.1	.033	-	-	92.5	85.4	89.0	11.4	123	84	99	111	128	148	193	243	321	358	406	.9	1.4
10 569	6	61.0	.052	-	-	91.5	83.2	87.4	10.8	130	84	99	114	141	163	213	246	297	328	373	1.0	1.3
11 570	6	63.0	.021	-	-	89.6	86.0	89.3	12.2	119	85	96	109	129	151	187	243	321	362	406	1.0	.8
11 571	3	63.3	-	-	-	91.7	84.2	88.6	11.2	124	84	96	110	124	148	200	250	318	352	398	1.2	.8
11 572	3	60.5	-	-	-	94.2	87.6	90.9	11.1	126	86	98	110	137	168	222	263	301	332	392	1.2	.8
11 573	6	62.2	.013	-	-	93.7	86.0	89.9	11.4	129	86	100	114	142	170	218	250	298	324	375	1.1	.9
12 574	2	63.2	.041	1	-	91.5	85.1	88.3	8.5	140	97	115	128	145	162	207	241	326	370	415	1.0	1.0
12 575	3	61.5	-	-	-	93.4	86.3	89.9	12.4	121	86	98	108	128	151	205	281	332	357	394	1.0	1.0
12 576	1	65.9	.015	-	-	94.6	87.4	91.0	11.0	122	83	97	108	124	141	185	223	259	283	337	1.0	1.0
12 577	5	61.7	.024	0	-	91.9	84.8	88.4	10.7	127	83	95	107	129	151	205	249	310	349	392	1.0	1.8
12 578	1	60.4	.005	0	-	94.8	94.8	91.0	10.6	127	90	104	113	150	201	245	307	350	381	1.0	1.0	
12 579	4	61.0	.020	1	-	95.0	88.9	92.0	11.1	124	82	103	103	122	150	213	267	318	367	398	1.0	1.5
12 580	4	58.1	.014	2	-	93.9	85.1	89.5	11.3	133	88	99	119	154	188	230	265	312	347	380	.9	3.1
13 581	6	62.0	.026	.00	-	90.1	82.0	86.1	10.0	136	90	111	124	150	177	223	268	341	374	409	1.2	1.9

TABLE 5. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
DATA FOR SOME ADDITIONAL GRADES--CONTINUED

## THIRD-GRADE GASOLINE--CONTINUED

206

TABLE 5. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
DATA FOR SOME ADDITIONAL GRADES--CONTINUED

INTERMEDIATE-GRADE GASOLINE

DISTRICT AND ITEM NUMBERS	GR., ASTM- PLES	SULF., ASTM	PHOS., ASTM D361	GUM, ASTM D1266	LEAD, ASTM D3231	OCTANE NUMBER	DISTILLATION, ASTM D86										RES LOSS %					
							TEMPERATURE, F (CORRECTED TO 760 MM HG)					PERCENT EVAPORATED										
							IBP	5	10	20	30	50	70	90	95	EP						
							LB	LB	ASTM D323	ASTM D439	ASTM F											
1 606	1	56.9	-	-	-	96.0	87.2	91.6	-	-	-	-	-	-	-	-	-					
1 607	3	62.8	-	-	-	96.5	96.8	91.7	13.1	11.4	80	89	98	116	136	192	244	303	330	378	0.8	2.2
2 608	1	56.9	0.010	0	0.001	91.9	83.4	87.7	9.8	13.2	85	101	113	132	152	214	291	338	361	423	1.0	2.0
2 609	15	63.9	•018	2	•002	96.2	87.4	91.8	14.1	10.9	77	85	94	111	129	185	236	304	333	373	•8	2.7
2 610	10	62.6	•016	1	•004	96.5	87.3	91.9	12.3	11.6	82	92	102	120	141	196	243	306	334	365	•8	1.8
2 611	1	62.1	-	-	-	96.6	97.0	91.8	-	-	84	87	103	124	146	202	262	346	378	414	1.0	4.0
2 612	1	62.8	•039	2	•002	97.3	89.4	93.4	12.3	11.9	85	105	120	149	209	233	273	314	333	369	1.0	2.0
2 613	1	58.5	•020	1	•001	94.0	83.5	88.8	10.5	13.5	83	96	107	128	153	205	267	338	372	420	1.1	1.9
3 614	3	62.7	•039	-	2.10	95.5	87.7	91.6	12.7	11.9	82	93	102	120	141	197	242	295	325	378	1.0	1.2
3 615	9	59.6	•017	-	-	96.5	87.5	92.0	12.3	11.6	82	92	102	120	141	197	242	295	325	378	1.0	1.2
3 616	9	61.5	•014	-	-	96.6	97.0	91.8	-	-	85	98	109	128	149	200	249	315	346	399	•9	1.1
4 617	10	62.5	•020	1	•017	96.3	87.9	91.2	13.0	11.5	80	89	100	121	147	209	252	314	350	397	•8	1.8
4 618	10	64.4	•014	4	•010	96.2	87.3	91.8	12.8	11.7	83	94	104	122	143	192	235	293	321	376	1.0	1.7
5 619	4	65.5	•009	2	•010	96.3	87.9	92.1	11.8	12.2	85	98	111	129	151	195	231	287	317	363	•7	1.1
6 620	1	62.5	•020	2	•001	92.9	84.2	88.6	11.7	12.4	88	104	114	131	154	202	246	307	328	380	1.0	1.0
6 621	3	65.6	•012	0	•001	96.4	88.1	92.3	12.7	11.6	83	96	107	121	140	187	229	277	306	357	•9	2.7
6 622	2	68.2	•006	1	•001	94.4	90.8	92.6	12.9	12.2	82	97	114	140	174	210	233	278	344	389	1.3	3.3
6 623	1	59.6	•010	1	•001	94.1	86.7	90.4	10.6	13.4	90	114	132	159	176	211	245	298	326	378	1.0	1.0
6 624	7	62.5	•017	3	•002	92.0	84.4	88.2	11.3	13.1	88	114	126	148	171	217	256	319	357	382	1.5	1.0
7 625	3	59.8	•017	-	•043	96.8	87.8	92.3	15.2	11.3	78	88	98	119	152	222	258	333	380	398	1.0	1.0
7 626	3	59.2	•009	2	•002	91.5	87.6	93.7	10.4	13.2	84	106	119	141	166	219	267	335	367	401	1.2	2.2

TABLE 5. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
DATA FOR SOME ADDITIONAL GRADES--CONTINUED

## **INTERMEDIATE-GRADE GASOLINE--CONTINUED**

DISTRICT AND ITEM NUMBERS	SAM- PLES	GR. • ASTM D267	SULF. ASTM D1266	GUM. ASTM D381	PHOS. ASTM D526	LEAD, ASTM D3231	OCTANE NUMBER	RVP, ASTM D439	DISTILLATION, ASTM D86						RES LOSS X								
									TEMPERATURE, F (CORRECTED TO 760 MM HG)														
									PERCENT EVAPORATED			5	10	20	30								
7 627	10	67.0	.012	0	.002	.33	96.0	87.5	91.8	13.0	115	82	96	105	122	143	187	223	282	318	354	1.0	1.6
7 628	1	59.5	.003	0	.002	.42	94.1	87.0	90.6	10.4	134	88	102	117	146	179	232	265	309	340	362	1.0	2.0
8 629	9	61.1	.020	-	.41	.96.2	87.6	91.9	12.2	12.0	120	84	96	106	124	146	198	241	300	331	385	.7	1.1
8 630	9	61.5	.018	-	-	.43	96.4	87.0	91.7	11.5	122	84	98	107	126	147	198	241	309	341	389	1.0	1.5
9 631	2	66.0	.015	-	-	.40	95.9	87.2	91.6	12.8	115	82	93	103	121	141	187	232	300	343	396	1.0	1.5
10 632	3	64.2	-	-	.36	96.4	87.4	91.9	12.4	118	82	94	103	122	146	193	231	292	326	390	1.1	1.4	
11 633	3	64.1	-	-	.34	95.3	87.4	91.4	12.5	121	80	93	108	131	157	212	277	317	343	392	1.0	1.0	
11 634	3	61.5	-	-	.34	96.4	87.1	91.8	12.5	118	82	94	103	119	134	191	241	285	318	378	1.1	1.9	
12 635	6	63.4	.021	-	-	.41	95.4	87.4	91.4	12.1	119	83	96	107	125	144	191	236	293	318	384	1.0	1.3
12 636	3	61.0	-	-	-	.42	96.1	87.3	91.7	12.9	116	86	98	106	120	139	196	250	312	345	383	1.0	1.0
13 637	3	67.2	-	-	.00	2.07	93.6	86.6	91.1	12.2	118	65	95	105	122	144	191	238	318	371	420	1.1	1.4
13 638	5	65.9	.020	-	5	.36	94.6	86.5	90.6	8.8	137	88	107	119	138	159	199	230	283	318	411	.9	1.3
14 639	1	65.8	.030	2	.001	2.10	95.6	90.2	92.9	11.4	125	90	99	117	135	153	202	246	337	386	435	1.0	3.0
14 640	8	66.6	.012	1	.001	.42	95.7	87.0	91.4	10.6	127	84	102	113	134	155	195	225	287	325	377	1.7	2.0
15 641	3	66.9	.020	1	.000	.41	95.8	86.9	91.4	11.3	125	88	104	116	136	159	199	230	288	325	380	1.0	3.0
16 642	3	60.9	.030	1	.000	.45	96.3	87.2	91.8	10.6	133	92	111	123	147	169	212	253	323	351	391	1.0	2.0
16 643	5	63.7	.018	3	.000	.43	96.3	86.9	91.6	10.6	128	89	106	120	138	158	195	230	294	332	378	1.1	1.9
16 644	1	60.4	.009	-	.000	.66	94.2	85.8	90.0	9.4	133	92	108	122	138	157	198	244	314	347	394	1.3	1.2
17 645	3	60.7	.028	-	1.48	96.2	88.3	92.3	11.4	127	82	92	111	137	163	216	264	320	359	407	1.2	2.8	
17 646	5	62.5	.042	3	.000	.58	96.2	86.9	91.6	11.1	126	85	101	115	136	160	204	243	301	340	375	1.2	2.0
17 647	1	58.2	.071	-	.19	95.3	85.4	90.4	9.3	138	86	108	124	149	174	216	258	330	366	422	1.2	.8	
AVERAGES	62.6	.020	2	.003	.58	95.4	87.0	91.2	11.7	123	84	98	111	131	154	202	246	307	341	389	1.0	1.7	

TABLE 5. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
DATA FOR SOME ADDITIONAL GRADES--CONTINUED

SUPER-PREMIUM GASOLINE																							
DISTRICT AND ITEM NUMBERS	GR. SAR- PLES	ASTM D287	SULF. ASTM D1266	GUM, ASTM D361	PHOS. ASTM D3231	LEAD, ASTM D526	OCTANE NUMBER	RVP, ASTM D439	DISTILLATION, ASTM D86														
									RES, ASTM D2699	MOT, ASTM D2700	R+M --- G/GAL	TEMPERATURE, F (CORRECTED TO 760 MM HG)											
												LB	F	IBP	5	10	20	30	50	70	90	95	EP
2 648	3	62.7	0.017	1	0.000	2.34	101.6	93.0	97.3	13.0	116	80	89	104	125	146	197	249	311	343	390	1.0	3.8
4 649	2	61.0	.049	3	.000	1.90	100.9	93.1	97.0	14.6	114	82	89	101	125	155	216	252	299	320	370	1.0	5.5
5 650	2	62.5	.010	2	.000	1.98	100.6	92.7	96.7	15.9	106	76	82	92	114	140	208	253	306	337	382	.9	4.9
AVERAGE		62.1	.025	2	.000	2.07	101.0	92.9	97.0	14.6	113	80	87	99	121	147	207	251	306	333	381	1.0	4.7
SAMPLES																							

TABLE 6. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
ANALYSES OF LOW-LEAD CONTENT GASOLINE

TABLE 6. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
ANALYSES OF LOW-LEAD CONTENT GASOLINE--CONTINUED

DISTRICT	GRADE	SAM <sup>a</sup> PLES	GR <sup>b</sup> , ASTM D287 API	SULF, ASTM D1266 WT %	GUM, ASTM D3231 MG	PHOS., ASTM D526 G/GAL	LEAD, ASTM D2700 G/GAL	OCTANE NUMBER RES, ASTM D2699	MOT, ASTM D2700	RVP, ASTM D323 LB	20/V/L IBP	DISTILLATION, ASTM D86 TEMPERATURE, F (CORRECTED TO 760 MM HG) PERCENT EVAPORATED					RES LOSS % EP							
												5 10 20 30 50 70 90 95												
												IPB	5	10	20	30								
5	THIRD GRADE	3	59.2	.027	-	.30	91.2	83.0	87.1	7.8	147	92	111	127	154	177	219	273	326	357	404	.7	1.3	
5	THIRD GRADE	2	61.6	.038	1	.000	91.7	84.0	87.9	13.9	120	76	97	112	140	173	225	282	375	400	415	.5	1.0	
5	THIRD GRADE	3	66.2	.076	2	.009	94.0	87.7	90.9	11.7	127	86	101	118	147	178	214	241	325	369	425	1.3	2.3	
5	REGULAR	1	63.1	.020	1	.000	93.0	84.8	88.9	14.9	110	73	81	95	115	142	201	255	334	374	423	1.0	2.5	
5	REGULAR	1	67.5	.070	0	.004	94.4	95.2	88.1	91.7	12.0	79	92	110	141	175	212	236	323	372	434	.6	1.9	
5	INTERMEDIATE	3	66.2	.009	2	.010	.38	96.2	87.7	92.0	11.8	122	85	98	111	129	151	195	231	287	317	383	.7	1.1
6	THIRD GRADE	2	69.2	.020	-	-	94.2	89.8	92.0	-	116	83	96	107	121	140	187	229	277	306	357	-	-	
6	INTERMEDIATE	3	65.6	.012	0	.001	96.4	88.1	92.3	12.7	122	82	97	114	140	174	210	233	278	344	389	1.3	3.3	
6	INTERMEDIATE	2	68.2	.006	1	.001	94.4	90.8	92.6	12.9	-	-	-	-	-	-	-	-	-	-	-	-		
7	THIRD GRADE	3	62.1	.010	-	-	91.0	84.2	87.6	-	-	-	-	-	-	-	-	-	-	-	-	-		
7	THIRD GRADE	3	67.6	.065	-	-	94.8	88.5	91.7	11.9	124	86	96	109	139	172	210	237	307	351	410	1.3	1.7	
7	THIRD GRADE	2	60.9	.012	-	-	93.5	85.6	89.6	11.2	127	83	94	106	133	161	219	268	313	331	364	1.1	.9	
7	INTERMEDIATE	3	59.8	.017	-	-	96.8	87.8	92.3	15.2	113	78	88	119	152	222	258	333	380	398	400	1.0	1.6	
10	INTERMEDIATE	10	67.0	.012	0	.002	.33	96.0	87.5	91.8	13.0	115	82	96	105	122	143	187	223	282	318	354	1.0	1.6
7	INTERMEDIATE	1	59.5	.003	0	.002	.42	94.1	87.0	90.6	10.4	134	88	102	117	146	179	232	265	309	340	362	1.0	2.0
8	THIRD GRADE	5	61.0	.036	-	-	91.1	84.2	87.7	11.2	125	83	-	106	129	-	213	-	342	-	409	1.0	3.0	
8	THIRD GRADE	1	61.7	-	-	-	96.5	87.0	91.8	10.9	125	70	-	107	127	-	203	-	315	-	387	1.0	2.0	
8	THIRD GRADE	1	62.1	-	-	-	92.2	85.6	88.9	11.5	123	82	-	107	129	-	201	-	346	-	444	1.0	3.0	
8	THIRD GRADE	5	59.0	.018	-	-	93.9	85.0	89.5	12.0	128	89	100	116	146	182	229	263	314	332	386	.9	1.6	
8	REGULAR	1	57.0	-	-	-	94.0	85.2	89.6	10.3	130	86	100	112	134	158	211	268	331	369	404	.6	.9	
8	INTERMEDIATE	9	61.7	.020	-	-	96.1	87.6	91.9	12.2	120	84	96	106	124	146	198	222	300	331	365	.7	1.1	
8	INTERMEDIATE	6	62.0	.018	-	-	96.5	86.8	91.7	12.2	119	82	93	103	123	146	199	243	312	341	390	1.0	1.8	
9	INTERMEDIATE	2	66.0	.015	-	-	.40	95.9	87.2	91.6	12.8	115	82	93	103	121	141	187	232	300	343	396	1.0	1.5
10	THIRD GRADE	2	60.3	-	-	-	.25	92.0	83.8	87.9	-	-	-	-	-	-	-	-	-	-	-	-		
10	THIRD GRADE	3	69.6	.019	-	-	.36	92.4	89.4	90.9	13.0	119	86	92	102	132	165	211	235	296	322	390	.9	2.1
10	INTERMEDIATE	3	64.2	-	-	-	.36	96.4	87.4	91.9	12.4	118	82	94	103	122	146	193	231	292	326	390	1.1	1.4
11	THIRD GRADE	2	63.1	-	-	-	.35	91.3	84.3	87.8	11.2	124	84	96	110	129	148	200	250	318	352	398	1.2	.8
11	THIRD GRADE	3	60.5	.013	-	-	.36	94.2	87.6	90.9	11.2	128	86	98	110	137	168	222	263	301	332	392	1.2	.8
11	THIRD GRADE	5	62.4	.013	-	-	.33	93.4	85.4	89.7	11.4	129	86	100	114	142	170	218	250	298	324	375	1.1	.9
11	INTERMEDIATE	3	64.1	-	-	-	.34	95.3	87.4	91.4	12.5	121	82	93	108	131	157	217	277	317	343	392	1.0	1.0
11	INTERMEDIATE	3	61.5	-	-	-	.34	96.4	87.1	91.8	11.5	118	82	94	103	119	134	179	241	285	319	376	1.1	.9

TABLE 6. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
ANALYSES OF LOW-LEAD CONTENT GASOLINE--CONTINUED

DISTRICT	GRADE	SAMPLES	GR.-% ASTM D287 API	SULF., ASTM D1266 WT %	PHOS., ASTM D381 MG	GUM, ASTM D526 G/GAL	LEAD, ASTM D323 G/GAL	OCTANE NUMBER RES., ASTM D2699	R+M ASTM D2700	20V/L ASTM D439 LB F	DISTILLATION, ASTM D86 TEMPERATURE, F (CORRECTED TO 760 MM HG)						RES LOSS % %								
											PERCENT EVAPORATED														
											IBP	5	10	20	30	50	70	95							
12	THIRD GRADE	1	65.9	.015	0	.001	.45	94.6	87.4	91.0	11.0	122	83	97	108	124	141	185	223	259	283	337	1.0	1.0	
12	THIRD GRADE	3	60.6	.024	-	-	.30	91.9	84.9	88.4	10.9	125	80	92	101	124	146	209	264	327	364	402	.9	1.6	
12	THIRD GRADE	1	60.4	.005	0	.001	.45	94.8	87.2	91.0	10.6	127	90	104	131	150	201	245	307	350	381	1.0	1.0		
12	THIRD GRADE	2	62.0	.020	1	-	.34	94.2	86.4	91.3	12.0	116	78	-	90	106	134	214	-	312	-	382	1.0	2.0	
12	THIRD GRADE	4	58.1	.014	2	.001	.13	93.9	85.1	89.5	11.3	133	88	99	119	154	188	230	265	312	347	380	*.9	3.1	
12	INTERMEDIATE	6	63.4	.021	-	-	.41	95.4	87.4	91.4	12.1	119	83	96	107	125	144	191	236	293	318	364	1.0	1.3	
12	INTERMEDIATE	3	61.0	-	-	-	.42	96.1	87.3	91.7	12.9	116	86	98	106	120	139	196	250	312	345	383	1.0	1.0	
13	THIRD GRADE	1	57.2	-	-	-	.24	94.7	84.6	89.7	9.8	137	92	112	127	151	177	221	267	337	373	416	1.2	1.3	
13	THIRD GRADE	2	63.2	-	-	-	.38	93.2	85.0	89.1	-	-	-	-	-	-	-	-	-	-	-	-	-		
13	REGULAR	1	58.8	.030	7	.000	.41	91.1	84.5	87.8	7.0	152	88	114	131	156	179	223	266	328	352	406	1.0	1.0	
13	REGULAR	1	59.0	.023	-	.000	.39	93.7	84.8	89.3	11.6	123	93	104	114	140	174	194	256	332	368	412	411	1.1	1.4
13	INTERMEDIATE	5	65.9	.020	5	.000	.36	94.6	86.5	90.6	8.8	137	88	107	119	138	159	199	230	283	318	411	*.9	1.3	
13	PREMIUM	1	65.6	-	-	-	.37	95.6	89.5	92.6	-	-	-	-	-	-	-	-	-	-	-	-	-		
14	INTERMEDIATE	6	66.6	.012	1	.001	.42	95.7	87.0	91.4	10.6	127	84	102	113	134	155	195	225	287	327	377	1.7	2.0	
15	THIRD GRADE	1	62.2	.010	1	.001	.49	93.2	85.1	89.2	9.4	138	93	113	125	146	168	217	262	322	345	392	1.0	1.0	
15	THIRD GRADE	3	66.9	.020	1	.000	.41	95.8	86.9	91.4	11.3	125	88	104	116	136	159	199	230	288	325	380	1.0	3.0	
15	INTERMEDIATE	3	66.9	.020	1	.000	.41	95.8	86.9	91.4	11.3	125	88	104	116	136	159	199	230	288	325	380	1.0	3.0	
16	THIRD GRADE	1	63.4	-	-	-	.50	94.0	86.1	90.1	10.7	126	85	104	115	134	152	193	237	297	331	398	1.1	1.4	
16	THIRD GRADE	1	63.0	-	-	-	.29	94.0	85.1	89.6	-	-	-	-	-	-	-	-	-	-	-	-	-		
16	REGULAR	4	63.0	.010	1	.001	.45	93.2	85.5	89.4	11.7	121	83	92	108	127	147	191	235	312	345	394	1.0	3.3	
16	REGULAR	2	60.4	-	-	-	.44	92.1	85.5	88.8	11.0	125	90	103	115	135	155	195	233	285	309	354	.7	2.3	
16	INTERMEDIATE	3	60.9	.030	1	.000	.45	96.3	87.2	91.8	10.4	133	92	111	123	147	169	212	253	323	351	391	1.0	2.0	
16	INTERMEDIATE	4	63.5	.016	-	.000	.35	96.2	86.7	91.5	11.3	124	89	103	116	135	155	193	227	290	329	372	1.1	1.9	
17	THIRD GRADE	3	57.1	.086	3	.000	.37	90.9	82.7	86.8	11.5	128	87	100	117	143	167	220	278	342	379	418	1.3	2.3	
17	THIRD GRADE	1	65.4	-	-	-	.33	95.9	87.8	91.9	11.0	128	91	-	121	142	-	202	-	289	-	378	1.0	2.0	
17	THIRD GRADE	2	56.5	.110	1	-	.31	94.9	84.9	89.9	10.4	-	88	-	116	-	222	-	343	-	403	1.0	1.0		
17	THIRD GRADE	1	62.3	-	-	-	.48	96.2	83.7	90.0	10.3	125	98	-	115	130	-	181	-	345	-	415	1.0	2.0	
17	REGULAR	2	59.9	-	-	-	.45	91.0	83.5	87.3	11.8	124	82	97	111	137	161	208	256	326	368	418	1.0	3.5	
17	REGULAR	2	56.5	.070	1	.000	.32	95.2	85.0	90.1	10.7	132	87	105	120	144	167	220	275	344	374	424	1.2	2.1	
17	REGULAR	5	61.8	.061	2	.000	.39	93.7	84.5	89.1	11.4	124	87	100	112	129	150	198	243	312	342	380	1.0	2.2	
17	REGULAR	3	57.1	-	-	-	.43	94.9	84.5	85.3	89.9	9.6	86	101	113	135	156	205	262	326	344	384	.8	2.2	
17	REGULAR	3	59.7	.022	-	-	.47	93.6	85.7	89.7	10.6	127	87	101	115	132	149	197	255	333	362	415	1.3	1.5	
17	INTERMEDIATE	2	62.3	-	-	-	.50	96.4	86.9	91.7	11.2	125	84	98	112	133	156	202	244	302	355	376	1.1	2.4	
17	INTERMEDIATE	1	58.2	.071	-	-	.19	95.3	85.4	90.4	9.3	138	86	108	124	149	174	216	258	330	366	422	1.2	.8	

TABLE 7. - MOTOR GASOLINE SURVEY, WINTER 1973-74  
ANALYSES OF UNLEADED GASOLINE

DISTRICT	GRADE	SAMPLES	GR.° ASTM D287 WT %	SULF. ASTM D1266 WT %	GUM, ASTM D381 MG	PHOS. ASTM D3231 G/GAL	LEAD, ASTM D526 G/GAL	OCTANE NUMBER	DISTILLATION, ASTM D86										RES LOSS % %					
									TEMPERATURE, °F (CORRECTED TO 760 MM HG)					PERCENT EVAPORATED										
									RVP, ASTM D323 LB	20V/L ASTM D439 F	ASTM D439 2	MUT, ASTM D2700	R+M ASTM D2700	MUT, ASTM D2700	R+M ASTM D2700	MUT, ASTM D2700	R+M ASTM D2700	MUT, ASTM D2700	R+M ASTM D2700					
1	THIRD GRADE	3	61.4	-	-	-	0.03	94.6	83.1	88.9	12.6	121	83	95	107	130	154	210	265	334	373	395	0.8	2.2
	THIRD GRADE	1	58.7	-	-	-	0.01	91.9	84.7	88.3	-	-	-	-	-	-	-	-	-	-	-	-	-	
	PREMIUM	3	53.8	-	-	-	0.02	100.9	90.1	95.5	12.8	119	62	94	102	122	147	217	258	308	333	392	.6	.9
2	THIRD GRADE	7	59.6	0.056	1	0.002	94.7	83.5	89.1	11.6	123	85	94	106	128	151	206	269	336	364	408	1.0	2.7	
	THIRD GRADE	4	57.5	0.017	1	0.000	92.1	83.9	88.0	9.6	134	91	105	117	134	154	214	289	342	367	423	1.0	2.0	
	THIRD GRADE	3	55.3	0.010	1	0.000	94.6	85.3	90.1	14.1	117	61	88	97	125	161	231	285	339	371	428	1.0	4.5	
2	REGULAR	1	61.5	0.074	1	0.000	95.0	82.8	88.9	11.8	123	84	88	109	132	154	208	267	335	360	400	1.0	4.0	
	REGULAR	1	56.7	0.012	2	0.000	94.6	86.0	90.3	14.1	118	80	84	103	128	159	226	277	358	398	426	1.0	5.0	
	INTERMEDIATE	1	56.9	0.010	0	0.001	91.9	83.4	87.7	9.8	132	85	101	113	132	152	214	291	338	361	423	1.0	2.0	
2	PREMIUM	12	54.6	0.014	0	0.000	101.0	90.3	95.7	12.8	121	81	92	103	124	153	228	262	323	347	396	.9	2.3	
	THIRD GRADE	10	58.6	0.018	-	-	0.03	94.8	83.7	89.3	11.5	122	84	97	107	128	149	196	269	336	360	400	1.0	1.4
	THIRD GRADE	3	64.0	0.037	-	-	0.02	92.0	84.2	88.1	11.7	125	84	96	107	136	170	214	252	324	372	414	1.2	1.3
3	THIRD GRADE	7	59.1	0.024	-	-	0.03	92.0	82.0	87.5	8.6	142	94	112	125	149	169	215	260	334	364	427	1.0	1.9
	THIRD GRADE	1	64.7	0.010	8	0.001	91.9	83.2	87.6	12.8	121	82	98	110	133	160	214	250	310	335	367	1.5	2.0	
	PREMIUM	10	53.7	0.014	-	-	0.02	101.4	90.6	96.1	12.1	125	84	94	106	132	163	234	267	330	349	384	1.0	1.5
4	THIRD GRADE	2	57.4	0.026	4	0.008	94.3	83.4	88.9	9.6	132	85	100	114	136	156	202	276	338	360	406	3	2.7	
	THIRD GRADE	4	57.9	0.006	-	-	0.01	91.8	83.7	87.8	12.2	118	84	99	108	125	136	184	276	334	369	408	1.0	1.0
	THIRD GRADE	1	61.1	0.011	2	0.002	91.8	82.9	87.4	12.1	123	85	102	112	131	152	208	263	325	356	408	1.0	1.7	
4	THIRD GRADE	1	66.1	-	-	-	0.01	92.4	84.0	88.2	-	-	-	-	-	-	-	-	-	-	-	-		
	THIRD GRADE	7	60.0	0.017	1	0.026	91.7	82.8	87.3	11.2	124	83	95	106	126	151	206	260	325	366	410	.8	1.4	
	THIRD GRADE	4	56.0	0.018	1	0.042	93.5	84.8	89.2	11.6	125	80	95	108	132	159	213	269	329	360	410	.6	1.5	
4	THIRD GRADE	12	61.7	0.012	1	0.045	91.9	84.1	88.0	11.0	127	84	100	112	133	156	206	262	328	355	408	1.0	1.3	
	THIRD GRADE	3	59.9	0.023	-	0.01	92.8	82.0	87.5	11.1	125	86	102	112	132	150	197	273	344	376	418	1.0	1.0	
	PREMIUM	7	53.8	0.012	1	0.000	100.9	90.4	95.7	11.7	126	82	96	106	129	161	234	268	330	352	392	1.0	1.7	
5	THIRD GRADE	6	62.0	0.017	2	0.003	91.8	83.7	87.8	11.1	126	83	98	111	133	159	207	247	307	334	383	.8	1.2	
	THIRD GRADE	3	58.7	0.056	-	0.04	91.7	82.3	87.0	8.1	147	92	111	127	154	178	228	274	345	375	424	1.0	1.0	
	THIRD GRADE	1	64.9	0.016	1	0.004	92.0	85.2	88.7	11.0	129	84	102	116	142	171	214	244	316	350	406	.9	1.1	
5	THIRD GRADE	6	61.2	0.035	1	0.015	92.2	82.4	87.3	12.7	120	81	93	105	127	153	212	270	359	393	427	1.0	1.9	
	THIRD GRADE	5	61.2	0.015	1	0.070	91.9	83.5	87.7	11.6	124	85	99	111	133	156	207	257	324	353	408	1.0	1.3	

TABLE 7. • MOTOR GASOLINE SURVEY, WINTER 1973-74  
ANALYSES OF UNLEADED GASOLINE--CONTINUED

DISTRICT	GRADE	SAM- PLES	GR., ASTH API	SULF., ASTH WT.	GUM, ASTH MG	PHOS. ASTH G/GAL	LEAD, ASTH G/GAL	OCTANE NUMBER RES. MOT, ASTH D2700	RVP/ ASTH D439 LB	DISTILLATION, ASTM D86					RES LOSS %								
										TEMPERATURE, F (CORRECTED TO 760 MM HG)													
										IBP	5	10	20	30	50								
6	THIRD GRADE	2	60.7	.029	-	.03	91.9	83.4	87.7	10.8	129	84	103	116	138	160	210	252	309	340	380	1.0	1.0
6	THIRD GRADE	1	58.4	-	-	.06	90.9	83.4	87.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	REGULAR	1	57.0	.026	1	.001	92.0	83.0	87.7	9.0	140	92	102	122	146	171	221	266	342	373	430	1.0	2.0
6	INTERMEDIATE	1	62.5	.020	2	.001	92.9	84.2	88.6	11.7	124	88	104	114	131	154	202	246	307	328	380	1.0	1.0
7	THIRD GRADE	5	63.1	.034	-	.01	91.5	83.1	87.3	10.3	128	88	99	110	132	158	202	245	306	332	384	1.0	1.0
7	THIRD GRADE	6	57.0	.013	-	.04	91.5	82.6	87.1	9.6	137	90	107	121	143	166	222	274	329	362	410	.8	1.0
7	THIRD GRADE	2	59.0	.009	-	.02	92.2	82.2	87.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	INTERMEDIATE	1	61.8	.017	3	.002	92.0	84.4	88.2	11.3	131	88	114	128	148	171	217	256	319	357	382	1.5	1.0
7	INTERMEDIATE	3	59.2	.009	2	.002	91.5	83.7	87.6	10.4	132	84	106	119	141	166	219	267	335	367	401	1.2	2.2
8	THIRD GRADE	6	59.6	.026	-	.03	93.4	83.1	88.3	10.4	127	86	94	111	132	148	198	266	333	365	406	1.0	2.0
8	THIRD GRADE	1	60.7	-	-	.05	90.8	82.7	86.8	9.6	133	90	-	121	138	-	203	-	345	-	429	1.0	1.5
8	PREMIUM	10	54.9	.012	-	.02	101.3	90.5	95.9	12.3	121	83	91	102	121	149	228	266	332	359	395	.9	1.9
9	THIRD GRADE	3	66.5	.013	-	.01	91.7	82.9	87.3	12.5	120	84	102	112	134	158	198	230	286	312	388	.6	.9
10	THIRD GRADE	4	61.4	.052	-	.01	91.3	83.0	87.2	10.8	130	84	99	114	141	163	213	246	297	328	373	1.0	1.3
11	THIRD GRADE	1	63.6	-	-	.01	92.4	84.0	88.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	THIRD GRADE	1	62.8	-	-	.02	91.8	85.2	88.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	THIRD GRADE	1	63.0	-	-	.04	92.1	84.9	86.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	THIRD GRADE	6	62.0	.026	-	.06	90.1	82.0	86.1	10.0	136	90	111	124	150	177	223	268	341	374	409	1.2	1.9
13	THIRD GRADE	1	57.5	-	-	.01	91.9	83.5	87.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	THIRD GRADE	7	54.6	.050	3	.000	91.9	83.1	87.5	8.0	153	95	119	140	171	197	243	285	342	369	427	1.0	1.4
14	THIRD GRADE	3	68.0	-	-	.00	91.0	82.9	87.0	11.8	123	82	101	112	133	156	199	231	282	312	364	1.3	1.7
14	THIRD GRADE	4	69.6	.012	1	.000	91.4	87.8	89.6	7.6	151	100	123	137	163	187	214	231	275	334	387	1.1	1.5
15	THIRD GRADE	4	58.3	.012	1	.001	92.0	83.2	87.6	7.7	146	98	119	131	150	167	209	257	317	346	399	1.1	1.2
16	THIRD GRADE	1	58.0	-	-	.00	91.9	84.2	88.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	THIRD GRADE	5	58.4	.009	1	.001	91.9	82.7	87.3	8.0	144	99	118	130	148	166	209	254	317	341	392	1.0	1.0
17	THIRD GRADE	5	59.3	.008	1	.000	92.2	84.9	88.6	9.0	142	92	113	129	154	181	229	265	320	340	391	1.1	1.4
17	THIRD GRADE	7	60.9	.060	3	.000	92.1	82.6	87.4	8.5	140	95	115	126	143	164	205	252	317	338	391	1.1	1.3
17	THIRD GRADE	4	54.9	.010	1	.000	91.3	82.8	87.1	7.6	153	93	120	137	163	189	229	260	302	323	374	1.1	1.1

TABLE 8. - Cumulative percents of samples of all grades by research octane numbers by districts, motor-gasoline survey, winter 1973-74

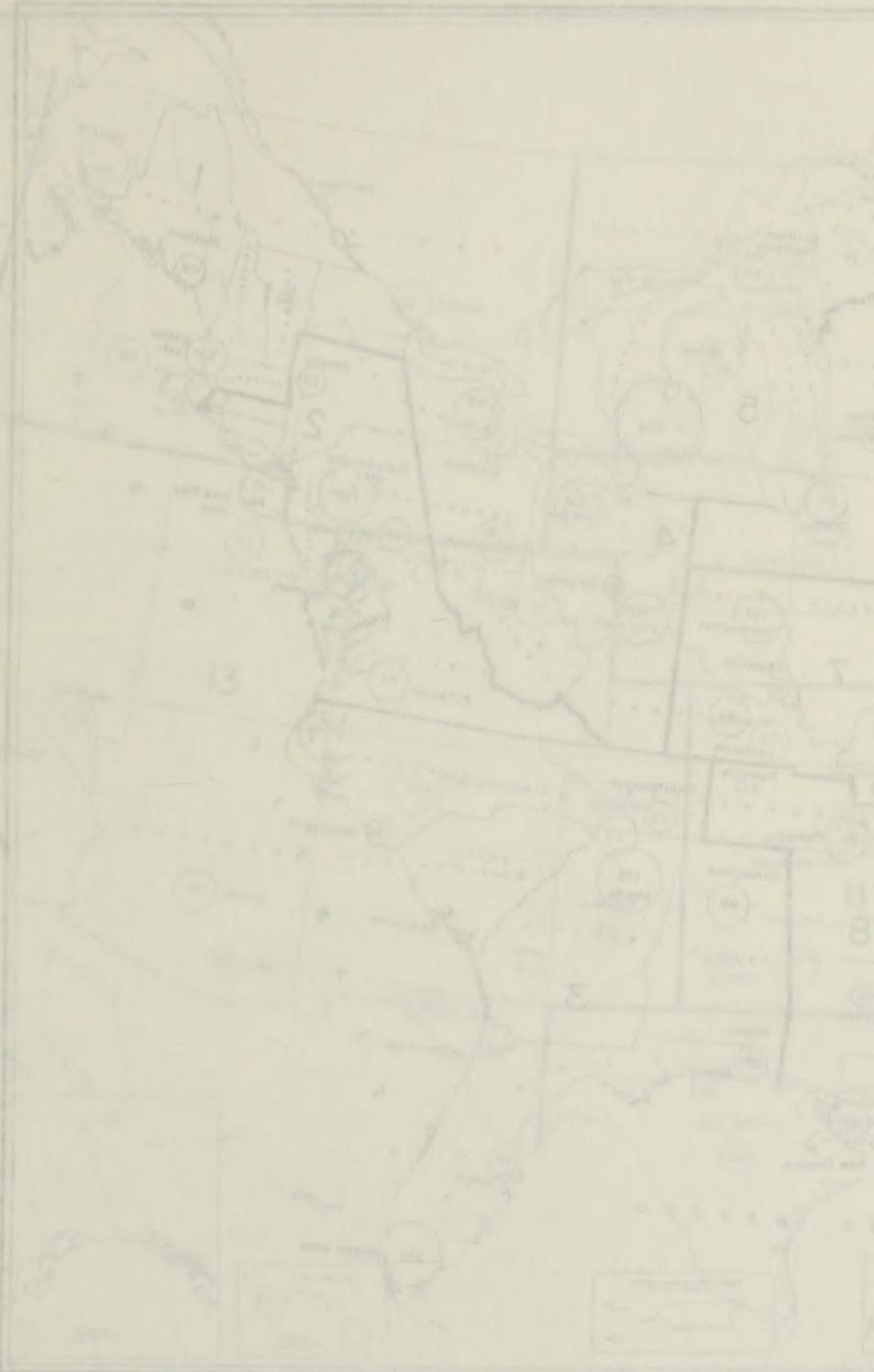
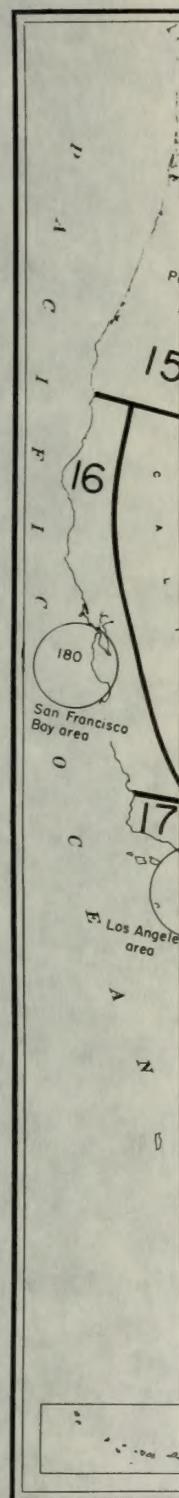
TABLE 9. - Cumulative percents of samples of all grades by motor octane numbers by districts, motor-gasoline survey, winter 1973-74

Motor octane number	District										Cumulative total samples						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
81												0.4					
82	0.2	1.1	1.3	1.6	1.8	2.2	2.5	2.9	2.1	1.1	2.8	2.1	2.3	1.1	2.7		2
83	3.3	3.2	3.8	5.1	2.7	4.5	1.8	2.9	2.1	0.9	13.9	8.0	3.1	3.3	6.6		36
84	4.9	4.9	5.0	8.1	7.8	4.4	7.1	3.6	8.7	6.7	1.5	0.9	22.5	8.4	12.2		133
85	6.5	9.5	9.5	13.1	15.0	4.4	16.0	5.5	35.6	29.0	11.2	5.2	34.1		27.8		330
86	19.5	26.7	22.3	32.6	31.8	27.4	35.4	20.4	48.1	43.0	35.5	19.3	45.5	41.9	33.6		802
87	42.3	45.5	50.8	53.3	58.9	42.5	51.1	45.9	50.0	49.2	46.3	42.0	52.7	50.9	48.1		1,569
88	50.4	54.3	55.3	58.6	62.5	50.4	56.7	55.3	50.0	50.8	53.3	54.7	55.2	52.6	52.2		2,336
89	54.5	56.5	56.3	59.6	63.1	53.1	57.8	55.6	51.0	51.6	53.7	58.0	61.3	57.1	56.1		2,584
90	56.9	60.1	59.0	61.6	64.6	54.9	58.2	58.7	51.9	53.4	54.4	59.9	66.8	60.9	56.7		2,680
																	2,822
91	69.1	71.7	70.6	70.7	61.9	69.4	68.4	58.7	59.6	61.0	64.2	75.0	77.5	80.9	81.1		3,350
92	90.2	92.7	91.2	94.7	86.9	85.0	89.9	93.3	76.0	87.6	82.2	81.6	95.5	96.2	99.4		4,257
93	99.2	99.6	100.0	100.0	97.0	98.2	98.9	99.7	92.3	97.4	93.8	97.2	99.3	99.3	100.0		4,616
94	100.0	100.0			97.3	100.0	100.0	100.0	97.1	99.5	98.1	100.0	100.0	100.0	100.0		4,660
95					100.0				98.1	100.0	98.8						4,673
96									99.0		99.2						4,675
97									100.0		99.2						4,676
98											100.0						4,676

TABLE 10. - Cumulative percents of samples of all grades by antiknock (octane) index (RON + MON)/2 by districts, motor-gasoline survey, winter 1973-74

TABLE II. - Locations and numbers of samples, motor gasoline survey, winter 1973-74





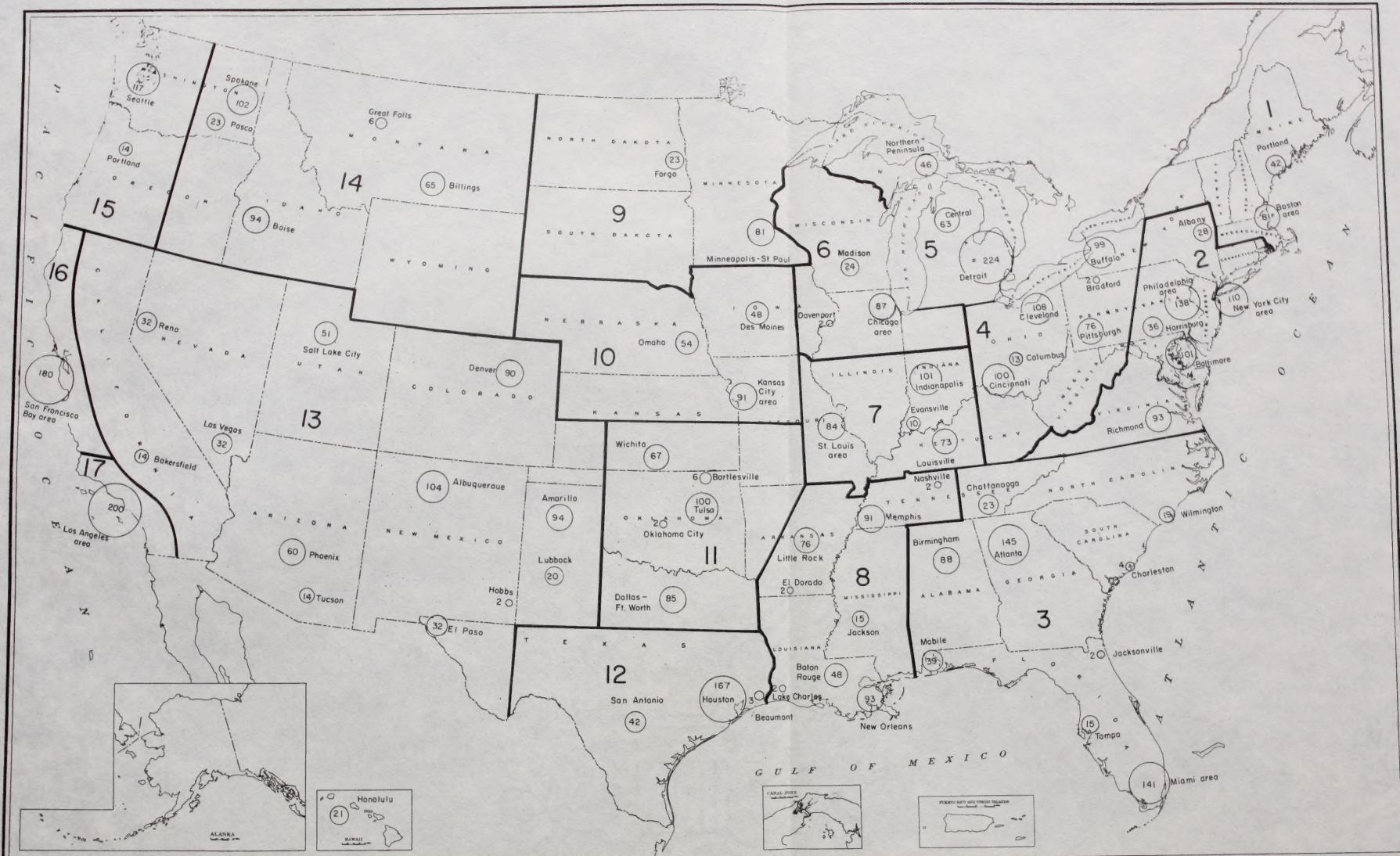


FIGURE 6.—Map Showing Location and Number of Samples for the National Motor Gasoline Survey, Winter 1973-74



UNIVERSITY OF ILLINOIS-URBANA



3 0112 084235867